

Security Tools Tapped For Compliance Projects

Users link devices for capturing info about IT security incidents to corporate servers

Security event and information management aredumors that were originally designed to help IT managers identify and deal with network threats are now finding new uses as regulatory compliance reporting tools within a growing

number of companies. driven by the ability of such products to capture and correlate the torrents of log data pencrated by security devices, networking equipment, and database and application servers, IT

"A large percentage of the customers we're speaking with originally purchased these tools for apprepating and correlating security data," said Ament Williams, an analyst at Gartner Inc. "Now they're telling us that they're using

Ithe devices lifer never lators compliance." For example, Calpine Corp. a San Jose-based power producer, purthat must be tested for Sarb chased a security event Ox compliance management appliance but the news on from Network Intelli-

Compliance, page 14

EMC, page 12

Sears Ends IT Pact; CSC Seeks Payment

Retailer says outsourcer breached contract: CSC claims that Sears schemed to avoid fees

Sears, Roebuck and Covended its 10-year, \$Lo billion IT outsourcing agreement with Computer Sciences Corp. atter just II months. But the companies now face arbitration on a prickly dispute over

with the U.S. Securities and the grounds of the cancella-Exchange Commission that it tion and whether Soars has to had cause to pull out of the pay termination fees to CSC contract, citing CSC's "failure At stake, according to moto perform certain of its obligations." The retailer tions that CSC filed April 25

no "material" penalties is a result of the termination. with the U.S. Court of Ar-Bot in its own SEC filling peals in Clucago, is roughly last week CNC countered that \$96 million in termination Sours' attempt to end the contees. USC claims that is the tract for cause was "contrived to avoid or reduce" the termipay to end the contract. nation fees that the outsourc Sears said in a May II filting

Sears-CSC, page MORE ONLINE

EMC's Midrange Disk Arrays Cannibalize Symmetrix Sales

midrange storage systems are skyrocketing - but the company acknowledged last week that some of the growth is coming at the expense of the Symmetrix arrays that were Users at the EMC Technolo ey Summit here said the yendor continues to belster the functionality once reserved for Symmetrix, such as data mirroring, spaeshot copying "They've added feature functionality and performance to make [Clariton] what the

Sales of EMC Corp's Clarison Clarison line with high-end and dynamic provisioning.

al good Page 5

the looming increase in job turnover and retirements means that succession planning for key IT players is now a necessity, reports Thomas Hoffman. Page 39

Mallalantillauthauthillulalathii.

80234945/CB/78 CH200521 5340

PERIODICALS PO BOX 1346 ANN ARBOR HI

48106-1346

56-4



Rational IOM MIDDLEWARE HELPS YOU ALIGN YOUR IT WITH BUSINESS GDALS TO DRIVE GROWTH. Finally, there's an integrated approach to application development, deployment and management. How you can leverage the combined power and breadth of 6M Reticost and Tryoli* to far exceed the limited testing and more monitoring that others ofter. Market-leading middlewere, like IBM Reticost Portfolio Manager and the newly integrated IBM Rational Performance Tester and Tivoli Monitoring for Transaction Performance, helps you manage every aspect of the IT lifecycle. Go beyond cost efficiencies. Innovate: Drive business growth.

VISIT IRM.COM/MIDDLEWARE/LIFECYCLE



BM WORKPLACE on the DOLLEWARE MAS AN EASIEN, RETTER WAY TO DO BUSINESS. BM* Workplace* solutions: Everything you need to stay productively not, yes, quickly. Plast, it as some at an intelled before the findings. The arm hing. The spoulchy find, yes, could be you not.

TO LEARN MORE, VISIT IBM.COM/MIDDLEWARE/PRODUCTIVITY



WebSphere

Me Wickness and Englishment in the part of the Medical Section 1 in the Company of th

SEE HOW AT IBM.CDM/MIDDLEWARE/CONNECT

YOU VS I.T. COMPLEXITY, RISING COSTS, MURPHY'S LAW

BM Throil IT Service Management can streamline your IT operations. It's THE MOST COMPLETE END-TO-EXIS MIDDLEWARE SOLUTION THAT DELIVERS THEM THESENSITION between biotrology, processes and people, while boostip the evaluability and elicitory of your IT services its automation book can help minimise in eval and to code, while modular condition immess it's solution that can give easily by your business.

IBM

YOU
VS
FRAYED CONTENT,
FRAYED SOLUTIONS,
AND VERY
FRAYED NERVES

Content Management | Digital axia Video Records. Documents Whatever from your information takes, IRM MAS AN INFORMATION MANAGEMENT TOWN the property of the Content Management in modelment, and in the Mill Information Takes, and in the RMI Information Management insult, allows content to be southern search southern security ones can packly got the information as the length information as a content from province can packly got the information as the length information as the content from province can packly got the information as the length information as the content content province can packly got the information and the length information as the content content content can be content as the content content content can be content as the content content can be content as the content content can be content content can be content can be content.

VISIT IBM.COM/MIDDLEWARE/CONTENT

CONTENTS



Raise the Bar In the Management section: Good year

dor relationships — and superior service — don't happen by accident. Here's how our Premier 100 IT leaders get vendors to notch up their performance. Page 42



05.23.05

Pick Your Battles

In the Technology section: Vulnerability management allows users to prioritize threats and assets by creating a security plan that goes beyond emergency response Page 21

NEWS

- 4 Single sign-on spees created by Microsoft and Sun may belp users in the future. But some need the technology now.
- The SEC issues new Sarbanes-Oxley guidelines that reduce the number of IT controls companies must assess.

 Plizer intends to consolidate
- more than 30 document management systems and standardize on XML to meet federal regulations.
- 8 IBM plant to release a database for configuration management, but other vendors claim it's not the first to take a federated approach.
- 8 Cybersecurity standards proposed for the utility industry are flawed, say conference attendees.
- 10 SAP announces that 10 technology providers have licensed its its ESA middleware.
- 10 Bank insiders were involved in a massive theft of account data over four years, New Jersey police allege.
- 12 Global Dispatches: Fujitsu plans to offer its palm-reading biometric system outside Japan; and Sabre agrees to buy a U.K. online travel agency.
 14 EMC will ship its storage vir-
- tualization technology late, but users are willing to wait.
- 55 EDS sues a North Carolina health agency after it awards a contract to a rival vendor.

TECHNOLOGY

- 24 Rounding Up Business Rules. Business rules engines and management systems automate enforcement of the rules and policies that make key processes run smoothly.
 - 30 Security Manager's Journal: Protecting Consumer Data on the Cheap. A mandate to protect personal data in the state agency's databases isn't accompanied by extra funds, so C.3. Kelly has to come up with an inexpensive strategy.
 - 34 Future Watch: Coming: Sensors and Pixels Everywhere. Accenture global director of research Anatole Gershman discusses work on intelligence technologies that are aimed at connecting IT systems with the physical world.

MANAGEMENT

- 38 Grooming the Next Generation. The impending exodution. The impending exoduof bably boomers and the dearth of computer science graduates appear more troublesome now that the economy is pickling up and IT staffers are starting to look around for greener pastures. If there was ever a time to get serious about succession planning, it's now.
- 48 Career Watch. FedEx's Sherry Asholm answers readers' questions about jobs and careers. Also, we look at ways to hang on to your company's "deep smarts," top workforce-building challenges and the good and bad new about CIOs.

OPINIONS

- 6 On the Mark: Mark Hall reports that one offshoring vendor is saying that pay increases in India aren't going to make doing work there more expensive for U.S. companies.
- 16 Don Tennant found someone else's canceled checks in his bank statement, so he took a look at the systems that allowed such a privacy breach.
- 16 Virginia Robbins loves that feeling when everything finally comes together and a project is successful on all fronts.
- 17 David Moschella thinks a new platform is emerging at the very front of the corporation. Will IT play a role?
- 36 Jian Zhen belps IT managers weigh the costs and benefits of buying software versus appliances.
- 50 Paul M. Ingevaldson, retired Ace Hardware CIO, makes the case for the CIO to report directly to the CEO. Pass it along.
- 58 Frankly Speaking: Frank Hayes laments what the Sarbanes-Oxley Act is doing to trust within businesses, but be sees a ray of hope in new SEC guidelines.

DEPARTMENTS/RESOURCES
At Deadline Briefs
News Briefs
Letters
IT Carreers
Company Index
How to Contact CW

Shark Tank

UNLINE

Sober-ing Reminder SECURITY: The release of two variants of

SECURITY: The release of two variants of the Sober worm prompts columnist Douglas Schweitzer to reiterate the importance of training employees to practice safe computing. © Questink 14220

Where Have All the Experts Gone? DEVELOPMENT: Offshoring and layoffs may look good for the bottom line at first, columnist Linda Hayes says, but the loss of inhouse experience can come back to haunt

house experience can come bac you. © Quistain 54200 Managing Global CRM

PRIVACY: Rolling out CRM internationally? Columnist Jay Cline says you'll need to consider the differing needs of the world's privacy "fundamentalists" and "pragmatists."

s There Really a Stans Celling for CIOs?

CAREERS: By taking steps to become more confident and action-focused, CIOs can become successful CEOs, says Korn/Ferry's Simon Wiggins. © Qualitative \$4285

Health Care Hurdles STORAGE WEBCAST: John D. Halamka, CIO at

soch Care-Group Health System and Harvard Medical School, oversees the IT infrastrunure for 3,000 doctors who move 70TB of data a day. He discusses how he keeps his users happy in this free on-demand webcast. O Quald his dBEPD





© Quichillet al¹⁴³ Keculadge Centers © Quichillet al²⁵⁷ The Order Store © Quichillet al²⁴⁷

Texas County Sues SAP and Siemens

Collin County, Texas, filed a lawsuit against units of SAP A6 and es AG, charging fraud, ch of contract and neolic reportation. The county is ng almost \$16 million in nes. The suit was filed after miss failed to complete work on an ERP system stated to be finished in October, SAP and

Waitt Resigns as **Gateway Chairman**

toway Inc. founder and Chair men Ted Waitt has regioned from the PC company, passing his ba ton to longtime board member erman for 20 years, said he is trate on his oth esses and to do philanhropic work. Snyder has been a ector at the irvine, Calif. based any since 1991 and was sident and chief operating our in the mid-1990s.

Broadcom Brings Suit on Qualcomm

mications chip wands en Corn, has med Out m inc., seeking to half the nefacture and sale of key Qu un chine. Two suits. Sled in the U.S. District Court in Califor nin, allogo that Qualc d a total of 10 Broads ds. Broadcom has also filed

Google Updates

Desidon Search gie loc. has released a desi n, has a ceries of ins

Single Sign-on Strategy **Faces User Scrutiny** is closely coupled with im-

NEWS

Microsoft, Sun to propose technical specs as a standard

BY PATRICK THIBODEAU THE SINGLE SIGN-ON specifications that Microsoft Corp. and Sun Microsystems Inc. announced this month won't belp John Wade. CIO at Saint Luke's Health System, a 10-hospital health care group

in Kansas City, Mo. That's partly because most of the systems at Saint Luke's are from Hewlett-Packard Co. But Wade said he just can't wait for IT wendors to ealer the single sign-on problem. His end users see the lack of that capability as their major systems beadache, he said. As a result, Wade expects to spend \$100,000 to \$500,000 of

his \$23 million IT budget to add single sign-on functionality by early next year. The effort could involve the creation of custom interfaces.

"I don't think any of the vendors have a real simplified directory management process," he said, "It's an industry-

wide problem." Sun and Microsoft agreed to two sets of specifications allowing single sign-on for users Windows [OutckLink \$4419]. The announcement came at the one-wear anniversary of an agreement by the two companies to settle a long-running legal dispute and cooperate on integrating their products. Microsoft and Sun have released draft specifications. They will be submitted to an

as-vet-unnamed standards body and will face seniting from rival vendors as well as users, Even Microsoft and Sun users won't see products with capabilities built around the oposed single sign-on specifications until next year. The access-control and sin ele sien-on products now on

the market have largely been developed to work in single operating environments, said Lynn Goodendorf, vice president of information privacy protection at Windsor, England-based InterContinental Hotels Group PLC, which opcrates 3,500 botels worldwide "The goal of most users is we want to have one solution that would work in all our different environments and operating systems, and not have multiple tools to do that,"

Goodendorf said. She noted that InterContinental has a single sign-on system for its Web-based applications but not for its mainframes Goodendorf said the Sun-Microsoft agreement was "a

positive development for privacy" because single sign-on

But it's unclear whether the specifications will be supported as standards by other vendors. For example, the Liberty Alliance, which includes Sun and is one of the major vendos groups working on identity management issues, character ized the Microsoft-Sun specifications as a step, not a solu-

proved data access controls.

Not 'Truly' Interoperable Sai Allavarpu, director of product management and marketing at HP, said Sun and Microsoft have no plan for in-

volving users or other vendors in finalizing the specifications. "So it doesn't appear to be a truly interoperable solution," he said. "It just appears to be

interoperability between two implementations."

But Sun and Microsoft said that the standards-approval process will involve other year dors. And they argued that the specifications are applicable for any system that uses either the Liberty Alliance's protocols or the Web Services Federation specification, which was developed by Microsoft and vendors such as IBM and

REA Systems Inc. IT managers have said that they welcome the prospect of single sign-on and that it could help reduce costs, but that there are risks as well "As nice as it is to think that one username and password will gain you access to all of your systems, it also means that the employees need to be overly protective of their login codes," said Brian Young. vice president of IT at Creighton University in Omaha, "Single sign-on gives everyone a master key to their house."

ID Management Ties Are GM's Top Priority

their products.

O 54543

guidance "should lower the

burden on IT." Priess said

dation that IT departments

general IT controls such as

conduct risk assessments on

those around information se-

curity may have introduced a

new "level of ambiguity," said

Sarbanes-Oxley Group of Au-

"The approach has shifted from 'test all controls' to 'a

risk-based approach to choos

ing which controls to review."

All in all, said Hagerty, the

result will depend heavily on

ditors and Professionals, an

online community of Sar-

banes-Oxley practitioners

based in Clifton, N.J.

The SEC's new recommen

SEC Offers Limited Sarb-Ox Relief to IT

Feedback leads to modifications in assessing controls

BY THOMAS HOFFMAN The U.S. Securities and Exchange Commission last week issued new Sarbanes-Oxley Act compliance guidelines that should provide IT departments at publicly held companies with some relief by reducing the number of IT controis that must be assessed

However, the SEC will continue to require that companies assess the controls that are in place for any new systems or software upgrades particularly those that affect

financial reporting - despite feedback from auditors and IT that such rules can be stifling. For instance, the SEC denied requests that it exclude new

systems and upgrades installed late in a fiscal year from yearend testing requirements. According to the guidelines "management can plan, design and perform preliminary assessments of internal controls in advance of system implementations or upgrades.

That means companies must conduct risk assess. ments on the systems during the planning stages "and focus on the high-risk areas," said Carter Priess, CEO of Pace Solutions Inc., an IT audit consultancy in Danvers, Ill.

The SEC guidelines are aimed at allowing auditors to reduce the number of checks they conduct on internal controls under Section 404 of the law. Some analysts say the changes suggest that the original requirements may indeed have been excessive

Implications Unclear Todd Naughton, vice president and controller at Zebra Technologies Corp., a high-

tech printing vendor in Vernon Hills, III., said be will need a few weeks to review the SEC's guidance with IT and external auditors to determine its implications. Still. Naughton said he's

"guardedly optimistic" that the SEC's latest guidance "will offer relief to our IT staff." In the statement last week. the SEC said that it will no

longer require an assessment nf all IT controls, only those that affect the financial reportSEC Statement

ing of an organization Many IT managers had pre-

viously complained about the lack of clarity in terms of the sessed, said John Harrety, an analyst at Boston-based AMR Research Inc.

By narrowing the scope of the IT controls that need to be tent from Word to XML

Beginning in October, the

FDA will require that pharmaceutical companies submit

changes to product labeling in

an XML format. Most pharma

ceutical companies, including

changes in Word documents.

Pfizer will decide in the

pext 30 days whether to use

an outside vendor to convert

existing documents to XML

Pfizer, now deliver these

MORE ON SARR-OX

how auditors interpret the guidelines. O 54533 Columned Frank Hayen gives his take or the guidelines. Page 56

Rules Prompt Pfizer to Consolidate Content Management Systems

Project to convert Word documents to XML also on tap

BY HEATHER HAVENSTEIN Pfizer Inc. is embarking on an effort to consolidate more than 30 document manage ment systems in order to streamline regulatory sub-

At the same time, the New York-based drug giant has started an effort to standardize on XML for authoring to meet new federal regulations.

The projects stem from the challenges associated with meeting new submission requirements from the U.S. Food and Drug Administration and other agencies, said Christooher Lee, director of worldwide regulatory operations as Different

perment system will allow the company to meet these evolving submission require

ploy tactical point solutions or revise content multiple times. Lee said. Pfizer plans to build the

content repository by using technology from the Documentum Inc. unit of Hopkintoo, Mass.-based EMC Corp. The content management system consolidation will span operations in 26 countries and different corporate groups such as research and market

ing to create one seamless flow of information to support regulatory submissions, according to Lee.

The company is also defin-ing "authoritative sources" of content so information about a single subject - such as a drug compound — can be limited to one location.

Consolidating con agement systems will likely allow Pfizer to more easily in tegrate content needed for regulatory submissions that

parate systems, said Nathaniel Palmer, an analyst at Delphi Group in Boston. "It will be a buge effort ... if they're able to do it successfully, the advantages would be

tremendous around the life cycle of information and being able to trace back to the origins of that information," Palmer said.

or build in-house tools to do the ich At the same time, Pfiper The com



plans to convert all of its regu create documents directly latory submission-related conin XMI, by using tools from Arbortext Inc. in Ann Arbor.

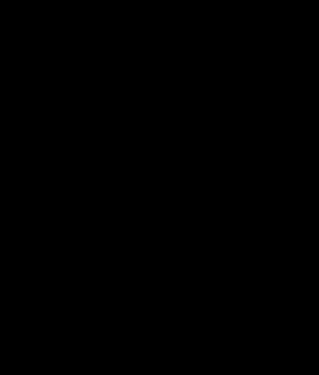
Mich., Lee said. In parallel, the company is building a common template that can belp in the process of

converting Word documents to XMI. "From a business standpoint. Word right now intro-

duces the opportunity for variability," which hinders offorts to standardize company documents, Lee said In addition, an XML-based authoring system will allow the people writing the content

- often physicians - to focus solely on content without having to worry about structure of the document, be said. However, Palmer noted that there will be cultural chal-

lenges associated with migra ing authoring to XML. "You have fieldoms ... that aren't going to easily change," be said. © 54532



good in a "should lower the burden on H. Priess said

dation that 11 departments

conduct risk assessments on syneral II controls such as

these around information se-

curity may have introduced a

new "level of ambiguity," said

Sarfyings-Oxley Group of Au

ditors and Professionals, an

online community of Sar

based in Chinon N1

banes-Oxley practitioners

from test all controls to a

The approach has shifted

inc which controls to review."

All in all, said Hagerty, the

result will depend heavily on

how auditors interpret the

Sanjay Anand, chairman of the

The SEC's new recommen

Feedback leads to modifications in assessing controls

The U.S. Securities and Exchange Commission last week Act compliance guidelines ments at publicly held compames with some relief by reducing the number of IT controls that must be assessed

tinue to require that compamine recover the controls that are in place for any new systems or software upgrades particularly those that affect

Project to convert

Word documents

Pfizer Inc. is embarking on

than 30 document manage

streamline regulatory sub-

York-based drug giant has

new federal regulations.

challenges associated with

meeting new submission re-

quirements from the U.S. Food

and Drug Administration and

At the same time, the New

started an effort to standardize

on XML for authoring to meet

The projects stem from the

ment systems in order to

missione

at Pfizer

an effort to consolidate more

to XML also on tap

financial reporting - despite for dback from auditors and EF that such rules can be stiffing For instance, the SEC denied

systems and upgrades installed late in a fiscal year from your end testing requirements. According to the guidelines 'management can plan, design and perform preliminary assessments of internal controls in advance of system implementations or upgrades

That means companies must conduct risk assessthe planning stages and focus Carter Priess, CEO of Pace So-

The SEC guidelines are aimed at allowing auditors to reduce the number of checks they conduct on internal controfs under Section 404 of the law Some analysts say the changes suggest that the origi nal requirements may indeed

Implications Unclear Todd Nauchton, sice president and controller at Zebra non Hills, Ill., said he will need

Technologies Corp., a buchtech printing vendor in Vera few weeks to review the SEC's enidance with IT and external auditors to determine its implications. Still, Naughton said he's

'euardedly optimistic" that the SEC's latest guidance "will offer relief to nur IT staff." In the statement last week, the SEC said that it will be longer require an assessment of all IT controls, only those that affect the financial report-

on the CET'S YOUT O

stic of an occanization Many IT managers had pre-

the IT controls that need to be

Pfiner now deliver these

an outside vendor to convert

existing documents to XMI

or build in-house tools to do

The company plans to

the job

guidelines O 54533 the quériers. Page 56

> create documents directly in XMI by using tools from Arbortest Inc. in Ann Arbor, Mich. Lee said In parallel, the company is

building a common template that can belo in the process of converting Word documents to XMI

"From a business standpoint, Ward right now introduces the opportunity for next 30 days whether to use

> documents. Lee said In addition, an XML-based authoring system will allow the people writing the content - nften physicians - to focus

solely on content without having to worry about structure of the document, he said However, Painter noted that there will be cultural challenses associated with migrat ing authoring to XML "You

have fieldoms ... that aren't going to easily change," he said O 54532

the if easier for users to access.

requests that it exclude new

However, the SEC will conon the higherisk areas" said lutions Inc., an IT audit consultancy in Danvers, III.

> ploy tactical point solutions or revise content multiple times. Lee said

Pfizer plans to build the content repository by using technology from the Documentum Inc. unit of Hopkinton, Mass, based EMC Corp. The content management system consolidation will span operations in 26 countries and different corporate groups

such as research and market ing to create one seamless flow of information to support regulatory submissions, according to Lee

The company is also defining "authoritative sources" of content so information about a single subject - such as a drug compound - can be limited to one location. Consolidating content man-

ement systems will likely allow Pfizer to more easily integrate content needed for regulatory submissions that may now be created on disPalmer, an analyst at Delphi Group in Boston. "It will be a huge effort . . . if they're able to do it success. fully the advantages would be

tremendous around the life cycle of information and being able to trace back to the ori-Palmer said. At the same time. Pfizer



have been excessive

viously complained about the lack of clarity in terms of the IT controls that had to be assessed, said John Hagerty, an analyst at Boston-based AMR Research Inc. By narrowing the scope of

MORE ON SARB-OX

plans to convert all uf its regu Rules Prompt Pfizer to Consolidate latory submission-related con-**Content Management Systems**

tent from Word to XML Beginning in October the FDA will require that pharmacentical companies submit changes to product labeling in an XML format. Most pharma-

centical companies, including changes in Word documents Pfizer will decide in the

variability," which hinders efforts to standardize company

other agencies, said Christopher Lee, director of worldwide regulatory operations A consolidated content management system will allow the company to meet these evolving submission require-

Brocade to Restate 2001-04 Results

Data storage equipment maker Broccade Communications Systems lax. said that if overstated its earnings by as much as SSC million from 2001 through 2004 because of improper accounting of its stock-option sepances. Sain Jose-based Broccade also disclosed that it is cooperating with a jaint investigation of its stockoption practice by the U.S. Department of Justice and the Securities and Exchange Commission.

HP Results Beat Expectations

Led by strong revenue growth outside of the U.S., Hewlett-Packard Co. reported that its second-quarter revenue grow 7% from the year-earlier period, slightly ahead of Wall Street's



PalmOne Names Colligan CEO

Handheld device maker PalmOne Inc. has named Ed Colligan president and CEO. He had been serving as interim CEO since former hand Todd Bradley left in Fatunay. Colligan has been charged with regaining PalmOne's dwirding share of an overall deciring handheld market from companies such as PR.

Microsoft Adds Hosting Tools

Microseft Corp. has unvalled new tools to help hosting service provides integrate Windows-based applications into their sites and improve site management. The Windows-based Hosting Version 3.5 m aimed ab providers that offer shared Web hosting or discount dedicated server hosting. The tool includes support for the tool includes support for

C ON THE MARK





Offshore Wage Gains Won't Raise .

... the cost of IT work heading to India. So claims Marc Hebert, executive vice president of marketing at Sierra Atlantie Inc., an offshore outsourcer in Fremont, Calif. Despite annual wage increases of 15% to 20% for IT staffers in India, the cost of technology operations there execution.

operations there won't edge upward. tion to offshoring Hebert argues. He voiced by many Desays that those pay mocrats backfired and gave the practice compensated for by some "good PR " Simibetter productivity larly, he suggests that from India-based IT television commentaworkers, with the tor Lon Dobbs who subcontinent's im regularly criticizes offproved technology shoring on his show, infrastructure con-"does more to help

tributing to the productivity the industry than anybody. boost. Hebert adds that In-The offshore phenomenon is dia's universities today prospreading, Hebert says, noting duce four engineers for every that some companies in Canaone graduating from a U.S. da - which itself is considschool - a estinathat he proered a "nearshore" alternative dicts will reach 10-1 by 2015. for U.S. businesses - have begun moving IT jobs to India through Sierra Atlantic.

The prevalence of graduates in India means that Serra in India means that Serra diameter can be well-trained entry level programmers and IT administrations, which helps keep its costs down. Hebert says. To keep up with demand, Serra Atlantic added 400 jobs last year, increasing its total workforce to about 900 employees. About 50 of those new yobs were in the U.S. Hebert claims that

during the last presidential



as companies replace their older PCs, all corporate desk tops and lantons should be TPM-ready. TPM chips can be used to encrypt e-mail messages and data on hard drives. Most important, says Sprague, the technology can authenticate users before letting them on corporate networks, making it more difficult for unauthorized people that once all your PCs are TPM-enabled, it may be possible to ditch your single sign-on plans because you'll be able to use the initial authentication to give end users. access to all their applications. Sprague says the TPM specification for mobile devices will be ready by the end of the year. Goodness, What

thin-client advocates boast about their devices. Yet, according to market research company IDC, thin clients make up a minuscule Pu to 2% of the overall desktop market. That doesn't dampen the enthusissm of Michael Kantrowig, CEO of Neoware





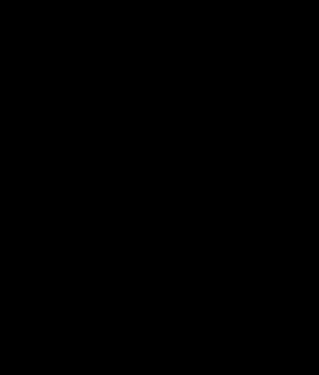
in the U.S., and IDC ranks it on the No. 2 chimselform to an dor behind Wyse Technology Inc Kantrowitz thinks his company is on a trajectory to now Nin love-board Wose albough he wouldn't say when, Furthermore, he products that by 2010, as much as 10% of desktop systems will be thin clients, due to a combination of cost issues and security concerns that TPM technolo gy may or may not resolve. Kantrowitz estimates that up to 90% of corporate desktors could be replaced by thin that it won't happen, "PCs are entrenched in IT departments and will continue to be

tract goes

down," Wood observes. Inonically, a vendor's support gets management kades only when the technology is flaky, he says.

The investibility of good support helps systems stay up, drives TOO down and unlocks business benefits that users might not otherwise see." Wood claims. His advice: When you're renegotiating your service and support contracts, take more than those annual fees into ac-

count. O 54489



Brocade to Restate 2001-04 Results

-as Inc. said that it overs rnings by as much as \$52 mil-n from 2001 through 2004 beno of improper accounting of stock-option expanses. Sen ed that it is cooperating with a joint investigation of its stock-option practice by the U.S. Deent of Justice and the Se

HP Results Beat Expectations

Led by strong revenue growt outside of the U.S., Herefettard Co. reported that its so quarter revenue greer 7% the year-earlier period, the about of Wall Street's



PalmOne Names Colligan CEO

inc. has named Ed Colligan presi-tent and CEO. He had been corary. Colligan has been charged with requiring PalmOne's date re of an overall deck

Microsoft Adds Hosting Tools

off Corp. has served is to help hosting service pros into their sites and 3.5 is aimed at providers that for shared Web heating or de-cerent dedicated server heating

C ON THE MARK

HOT TECHNOLOGY TRENDS, NEW PRODUCT **NEWS AND INDUSTRY BUZZ BY MARK HALL**



Offshore Wage **Gains Won't Raise**

... the cost of IT work heading to India. So claims Marc Hebert, executive vice president of marketing at Sierra Atlantic Inc., an offshore outsourcer in Fremont, Calif. Despite annual wage increases of 15% to 20% for IT staffers in India, the cost of technology election, the opposi-

operations there won't edge upward, Hebert argues. He says that those pay increases are being compensated for by better productivity from India-based IT workers, with the subcontinent's improved technology infrastructure con-

tributing to the productivity boost. Hebert adds that India's universities today produce four engineers for every one graduating from a U.S. school - a ratio that be predicts will reach 10-1 by 2015. The prevalence of graduat in India means that Sierra Atlantic can hire well-trained entry-level programmers and IT administrators, which helps keep its costs down. Hebert says. To keep up with

through Sierra Atlantic demand, Sierra Atlantic added 400 jobs last year, increasing its total workforce to about 900 employees. About 50 of those new jobs were in the U.S. Hebert claims that during the last presidential

tion to offshoring voiced by many Democrats backfired and gave the practice some "good PR." Similarly, he suggests that tor Lou Dobbs, who regularly criticizes offoring on his show.

"does more to help the industry than anybody." The offshore phenomenon is spreading, Hebert says, noting that some companies in Cana-da — which itself is considered a "nearshore" alternative for U.S. businesses - have

Trust your PC to protect your . . .

dows, but the PC hardware itself. In March, Dell Inc. became the last of the major PC makers to begin shipping sys-tems with Trusted Platform Module (TPM) security devices, which are based on specifications developed



says that in four or five years, oanies replace their older PCs, all corporate desktops and laptops should be TPM-ready. TPM chips can he used to encrypt e-mail messages and data on hard drives. Most important, says Sprague, the technology can authenticate users before lettine them on corporate networks, making it more difficult for unauthorized people to access systems. He adds that once all your PCs are sible to ditch your single sign-on plans because you'll

TPM-enabled, it may be poshe able to use the initial suthentication to give end users access to all their app tions. Sprague says the TPM specification for mobile deces will be ready by the end of the year. Goodness. What will we do when computing becomes secure

A lot cheaper and more secure than PCs. That's what all

thin-client advocates boast about their devices. Yet, according to market research company IDC, thin clients make up a minuscule 1% to 2% of the overall desktop begun moving IT jobs to India market. That doesn't dampen the enthusiasm of Michael Kantrowitz, CEO of Neows

Systems Inc. in King of Prussia, Pa. After all, Fortune mag azine just dubbed be eighth

in the U.S., and IDC ranks it as the No. 2 thin-client vendor behind Wyse Technology Inc. Kantrowitz thinks his company is on a trajectory to pass San Jose-based Wyse, alough he wouldn't say when. Purthermore, he predicts that by 2010, as much as 10% of desktop systems will be thin clients, due to a combination of cost issues and security concerns that TPM technology may or may not resolve. antrowitz estimates that up to 90% of corporate desktops could be replaced by thin clients, but he acknowledges that it won't happen. "PCs are entrenched in IT depart

ments and will continue to be entrenched," he says. CEOs, eyen CIOs, just don't see . . .

... good vender support. That's the response from J.B. Wood, president of the Service & Support Professionals Association in San Diego, to a recent item here about IT execs taking aim at pricey technical ort deals [QuickLink 53633]. "As you move up the IS chain, user-support satisfaction levels so down, and the perceived value of the (service and support) con-

tract goes down," Wood observes. Ironically, a vendor's support sets kudos only when the

technology is flaky, he says. "The implet bility of good

support helps systems stay up, drives TCO down and unlocks business benefits that users might not otherwise see," Wood claims. His advice: When you're renegotiating your service and support contracts, take more than

those annual fees into ac-count. O 54480

CIOs RELY ON THEM



CFOs INSIST ON THEM

If there's one thing CIOs and CFOs can agree on, it's Fujitsu PRIMERGY® servers.

Featuring the proven relability of intel® Xeon® processors. PRIMEROY blade, rack and tower servers gwe COS the power to drive complex, business-critical enterprise applications based on Linux and Windows® operating systems. PRIMEROY servers also provide a low total cost of ownership (TCO).





serviceability and manageability CFOs demand. To help mantain high performance and low TCO. Rujetus features Cool-Safe[®] cooling technology. Developed with asiston simulation techniques, this innovative, new approach to thermal management optimizes processor arisfon to leep PRIMEROY servers running at peak performance in malaunoff III revinorments.

For more information on the complete line of PRIMERGY servers and how Fujitsu PRIMERGY servers can bring CIOs and CFOs together, visit us.fujitsu.com/computers/PRIMERGY or call 1-800-831-3183.





IBM Adds New Choice On Configuration DBs

Claims to offer first truly federated repository for IT info; others disagree

BY MATT HANGLEN week detailed plans to release a database for consolidating information about system configurations

and other IT settings, it claimed to be the first manage "a truly federated approach" for pulling together such data.

But that claim unleashed a torrent of reactions from competitors that said they already offer what IBM plans to roll out later this year. And two technology analysts said IBM's Tivoli unit is playing catch-up to other vendors on the configuration management data-

hase (CMDB) concept. Tivoli's upcoming Change and Configuration Manage ment Database software and other products like it aim to give IT managers a central repository of data about their technology installations. The use of a single management database is recommended as part of the IT Infrastructure Library (ITIL), a set of IT

management guidelines. Wayne Fowler, director of server and systems management of RMO Financial Group said the Toronto-based banking firm is devoted to ITIL practices. "We're a pure-play ITII. shop, and we take a religious approach to it," be said.

But he added that BMO plans to use six to 12 management databases from different vendors to help administer the more than 2 million components of its global network. IBM's forthcoming offering

will be part of that mix BMO has been a Tivoli customer for six years. But it also uses BMC Software Inc.'s IT service desk management tools and Peregrine Systems Inc.'s asset management software, Fowler noted. "The approach you want to ask from any vendor is. How do you fit in a federated environment or would you rather try to rule the world?" he said

Lender's Service Inc., which provides property valuation. title and closing services to lending companies, doesn't use a federated database yet. But Marc Machin a senior systems engineer at LST's Santa Ana. Calif. office, said it would be desirable to have

one so he could have "one entry point to look at everything." He added that he needs to research how well the available databases integrate with other tools BMC today will appounce

plans to combine its Patrol and Patrol Express software to create a product called Performance Manager that's designed to offer users both agent-based and agentless management tools.

The two Patrol products will be bundled under a single license next month, and BMC plans to integrate them with its CMDB next year, said Tom Bishop, who was named chief technology officer at the Houston-based company last week BMC announced its CMDB in lanuary and has shipped the database to 65 customers. according to Bishop.

Hewlett-Packard Co., Com puter Associates International Inc. and other vendors said they also have federated databases for consolidating IT information. For example, HP has offered a CMDR with its OpenView Service Desk software since 1999, said Bill Emmest, chief solutions officer for HP's software unit IBM plans to ship a limited

release of the Tivoli database this summer. Mary Johnston-Turner on analyst at Summit Strategies Inc. in Boston, said the upcomine database is "extremely important ... because IBM has been behind on addressing ITIL." O 54516

SYSTEM MANAGERS IBM plans two upgrades of the manage

One of the concerns that in-

Utility Cybersecurity Plan Questioned by two-thirds of NERC's mem-A key strength of the pro-

A set of cybersecurity stan-

dards proposed by the North American Electric Reliability Council (NERC) are too detailed in some instances, attendees at an industry conference here said last week. Users at the Platts Cyber Se curity for Utilities conference said that if the proposal is adopted, it could lead to regional differences in interpre-

tation and extra cumpliance work for information security managers at electric utilities. NERC's proposed cybersecurity standards, known as CIP-002 through CIP-009,

cover areas ranging from the security of critical cyberassets to personnel screening and training requirements. Charles Noble, a member of

the NERC drafting committee who is also the information security coordinator at ISO New England in Holyoke, Mass... said the biggest weakness of the proposal is that it's too prescriptive in certain areas. like records management, where it spells out the number of years that specific types of records must be maintained

posal is that it's being driven by utilities and not by the federal government, said lames Sample, manager of information security services at California Independent System Operator Corp. in Folsom. With utility driven standards "we can control our own destiny," Sample said.

Enforceability Unclear NERC's membership includes utilities and related organizations. Its mission is to ensure the reliability of bulk nower generation in North America. As a volunteer organization, its standards aren't currently

omforosable

However, the energy bill that's currently being debated by the U.S. Senate includes a proposal to grant NERC reguory authority. And even if NERC's proposed standards aren't eventually approved by

its members, it's widely believed that the Federal Energy Regulatory Commission (FERC) or state regulatory authorities would sten in to create and enforce more-risid cybersecurity requirements. If the standards aren't passed CALFORMA ISO

bers as required. "I wouldn't be surprised if FERC doesn't iump on it, make it a federal regulation and toughen up some of the language," said Scott McCoy, director of security at Minneapolis-based Xcel

Energy Inc. To date, NERC members have voted on two drafts of the proposed standards. Earlier this month, the council posted the third draft, which members will be able to comment on for a 45-day period. In late July, the NERC drafting committee will post a final draft for a 30-day review before the next round of voting, said Larry Bugh, chairman of the NERC stan

dard drafting team and man-

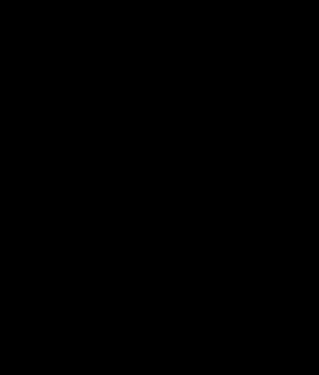
ager of IT for the East Central Area Reliability Council, one of 10 regional NERC units. The biggest challenge we face is the corporate culture.

JAMES SAMPLE, MANAGER OF INFORMATION SECURITY SERVICES. dustry security managers have is that the current standard. brown as IIA 1200 is set to expire in early August, thus leaving a gap between cybersecurity standards. Barry Lawson, manager of power delivery at the National Rural Electric Cooperative Association, said he believes most utilities will continue to abide by the current standard until another one is approved

Thomas Kropp, a project manager at the Electric Power Research Institute in Palo Alto, Calif., noted that other eybersecurity standards being developed by organizations such as the National Institute of Standards and Technology and the Institute of Electrical and Electronics Engineers Inc. may end up imposing conflicting demand upon utilities.

If and when NERC cyberse curity standards are published and regardless of how their content may change, utilities will still face compliance chal lenges. The biggest challenge we face is the corporate culture" in terms of setting plant operators and other workers to change their mind-sets about security, said Sample

O 54536



IBM Adds New Choice On Configuration DBs

Claims to offer first truly federated repository for IT info; others disagree

THEN IBM last week detailed plans to release a database for consolidating information about system configurations and other IT settings, it

claimed to be the first management tools vendor to announce "a truly federated approach" for pulling together such data.

But that claim unleashed a torrent of reactions from competitors that said they already offer what IBM plans to roll out later this year. And two technology analysts said IBM's Tivoli unit is playing catch-up to other vendors on the con-

base (CMDB) concept. Tivoli's upcoming Change and Configuration Manag ment Database software and other products like it aim to give IT managers a central repository of data about their ology installations. The use of a single management database is recommended as part of the IT Infrastructu Library (ITIL), a set of IT

agement guidelines. Wayne Fowler, director of server and systems management at BMO Financial Group, said the Toronto-based banking firm is devoted to ITIL es. "We're a pure-pli ITIL shop, and we take a relious approach to it," be said. But he added that BMO

plans to use six to 12 manage ment databases from different vendors to help administer the more than 2 million components of its global network. IBM's forthcoming offering will be part of that mix.

BMO has been a Tivoli customer for six years. But it also uses BMC Software Inc.'s IT vice desk managem ols and Peregrine Systems

ware. Fowler noted, "The approach you want to ask from any vendor is. How do you fit would you rather try to rule the world?" he said. provides property valuation, title and closing services to

in a federated environment, or Lender's Service Inc., which leading companies, doesn't use a federated database vet But Marc Machin, a senior systems engineer at LSI's San ta Ana, Calif., office, said it would be desirable to have



one so be could have "one entry point to look at everything." He added that be needs to research how well the available databases integrate with BMC today will anno

plans to combine its Patrol and Patrol Express software to create a product called Performance Manager that's designed to offer users both apent-based and apentless gement tools

The two Patrol products will be bundled under a single license next month, and BMC plans to integrate them with its CMDB next year, said Tom Bishop, who was named chief technology officer at the Houston-based company last week. BMC announced its CMDB in January and has shipped the database to 65 customers. according to Bishop.

Hewlett-Packard Co., Com puter Associates International Inc. and other vendors said they also have federated databases for consolidating IT information For example HP has offered a CMDB with its OpenView Service Desk soft ware since 1999, said Bill Emmett, chief solutions officer for HP's software unit.

IBM plans to ship a limited release of the Tivoli database this summer. Mary Johnston-Turner, an analyst at Summit Strategies Inc. in Boston, said the upcoming database is "extremely important ... because IBM has been behind on addressing ITIL* O 54518

SYSTEM MANAGERS EM plans two upgrades of the manage-ment solivors it burnles with its runners

Utility Cybersecurity Plan Questioned

A set of cybersecurity standards proposed by the North American Electric Reliability Council (NERC) are too detailed in some instances, attendees at an industry conference here said last week

Users at the Platts Cyber Security for Utilities conference said that if the proposal is adopted, it could lead to regional differences in interpretion and extra compliance

work for information security gers at electric utilities. NERC's proposed cyber-security standards, known as CIP-002 through CIP-009, cover areas ranging from the

security of critical cyberassets to personnel screening and training requirements. Charles Noble, a member of

the NERC drafting committee who is also the information security coordinator at ISO New England in Holyoke, Mass. said the biggest weakness of the proposal is that it's too escriptive in certain areas. like records management, where it spells out the num!

of years that specific types of records must be maintained.

A key strength of the proposal is that it's being driven by utilities and not by the federal government, said James Sample, manager of inform tion security services at California Independent System Operator Corp. in Folsom. With utility-driven standards.

"we can control our own destiny." Sample said.

Enforceability Unclear NERC's membership includes utilities and related organizations. Its mission is to ensure the reliability of bulk power generation in North America. As a volunteer organization, its standards aren't currently However, the energy bill

that's currently being debated by the U.S. Senate includes a proposal to grant NERC reguory authority. And even if NERC's proposed standards aren't eventually approved by its members, it's widely believed that the Federal Energy Regulatory Commission (FERC) or state regulatory

authorities would step in to create and enforce more-rigid cybersecurity requirements. If the standards aren't passed

by two-thirds of NERC's members as required, "I wouldn't be surprised if FERC doesn't jump on it, make it a federal regulation and toughen up some of the language," said Scott McCov, director of security at Minneapolis-based Xcel

Energy Inc To date, NERC members have voted on two drafts of the

proposed standards. Earlier this onth, the council posted the third draft, which members will be able to comment on for a 45-day period. In late July, the NERC drafting committee will post a final draft for a 30-day review before the next round of voting, said Larry Bugh, chairman of the NERC standard drafting team and man ager of IT for the East Central

Area Reliability Council, one of 10 regional NERC units. The biggest 7 challenge we face is the corporate culture.

JAMES SAMPLE, MANAGER OF INFORMATION SECURITY SERVICES.

One of the concerns that industry security managers have

is that the current standard. known as UA 1200, is set to expire in early August, thus leaving a gap between cybersecurity standards. Barry Lawson, man nower delivery at the National Rural Electric Cooperative Association, said be believes most utilities will continue to

abide by the current standard until another one is approved. Thomas Kropp, a project manager at the Electric Power Research Institute in Palo Alto, Calif., noted that other cybersecurity standards being developed by organizations such as the National Institute of Standards and Technology and the Institute of Electrical and Plantmaior

Engineers Inc. may end up imposing conflicting demands

upon utilities. If and when NERC cybersecurity standards are published and regardless of how their content may change, utilities will still face compliance challenges. "The biggest challenge we face is the corporate culture" in terms of setting plant operators and other workers to change their mind-sets about security, said Sample.

Introducing data centers <u>on</u> <u>demand</u>

New architecture supports power densities of today... and tomorrow



Number	IT Rocks	kW per Reck	to buy	(36 installments)	
ISXCR1SY16K18P5	1	up to 5kW	\$14,999°	1499"	
ISXT240MD6R	6	up to 5kW	*149,999°	4,999"	
ISXT240M011R	11	up to 5kW	1249,999	°7,999	
ISXT280MD40R	40	up to 5kW	*699,999*	"21,999"	
ISXT2800MD100R	100	up to 5kW	1,649,999	*50,999	

High Density Configuration (shown above)

√ N+1 power and cooling

✓ Secure, self-contained environment

✓ Integrated management software



High density upgrades start at *10,999

Order your solution today. Call 888-289-APCC x3411.

Visit today and receive FREE APC White Paners



Don't see the configuration you need?

Try APC's online InfraStruXure BuildOut Tool today and build your own solution Go to http://promo.anc.com and enter key code c188x Call 888-289-APCC x3411

All multi-rack configurations feature.

✓ Peak capacity of 20kW per rack

✓ Enhanced service package

Access to het aute

data cent

InfraStr

DATA CENTERS ON DEMAND Highly available and manageable.

that early supports both standardand both density applications Up to 20kW a cack for any

blade server application Universal racks Ships in 5 days*** Installs in I day*** Distings on site power

generation Reused floor not required Vendor omatral quaranteed

corporations





Nortel, IBM to **Build Network Gear**

Hortel Hetworks Corp. and IBM have agreed to jointly devel working products for the tele ctions industry. They will initially focus on developing carrier-grade servers for con ts will be based on #8M's doCenter server design. The sies have created a 30-

CEO Otellini Begins New Era at Intel

Paul Guillini has become the fifth O in Intel Corp.'s 37-year history - and be's the first person und to rise to the top spot rs. Otalini replaces Craig rett, intel's CED since 1998 o will become chairman. An we, the current chairman, will ue to advice intel's leaders.

BT Group Posts Sales, Profit Gains BT Group PLC credited its "new nave" offerings - information

and communications technolog as well as broadband and mob onue and profit in its fourth floc arter, which ended March 31

\$8.798 S556M Fujitsu Shipping High-End Sparc CPU

Fullton Computer Systems Corp. ing a faster version of its tipping a thatter version of its 084 V precessor with certain siPower Unix servers. The pany said five PrimePower ofe will ship with a 2.08-0Hz 1584 V CPU with 4MB of onache. Fujitse wouldn't say or it plays to skip the new

Ten Tech Firms License SAP's ESA Middleware

CEO also hints at pricing moves at the Sapphire event BY MARC L. SONOINI

AP AG last week said that 10 technology companies including Microsoft Corp., Cisco Systems Inc. and Computer Associates International Inc., have licensed its Enterprise Services Architecture (ESA) as it continues to extend its

comics-oriented probits of two platform. At its Sapphire 2005 user event here, the ERP and business applications vendor touted the Web-based ESA and its centerpiece NetWeaver middleware technology, which can be used to integrate SAP's mySAP suite with homegrown and third-party applications.

In addition, Henning Kagermann, chairman and CEO of SAP hinted that as the FSA stack evolves, SAP might change its current, traditional licensing policy to what he cailed "value-based pricing."

Hear Interest Users at the conference said

they are closely watching the evolution of ESA. The NetWeaver stack is "absolutely part of our business strategy," said Ed Deenihan. vice president of global services at Network Appliance Inc., a storage systems and services provider and an SAP

partner. Deenihan said his company is looking to integrate its remote and on-site support offerings. By using NetWeaver, he said, "we don't think we have to rip out what we've already done. The key is we can

tomer wants Edward Pisula Ir. director of corporate IT at Respironses

Inc., a Murrysville, Pa.-based maker of respiratory devices. said the NetWeaver platform can be used to tweak his company's software for competitive advantage. Respironics now runs SAP's

R/3 ERP and Business Warehouse business intelligence applications. Pisula said Net-Weaver could make SAP's proprietary ABAP programming language easier to use by crafting simple user interfaces that provide users with pertinent data via a portal. As for value-based pricing

Pisula said the jury is still out "I'm willing to listen," he said. Ralph Loura, vice president and CIO at Holtsville, N.Y .based wireless products provider Symbol Technologies

Police allege that a 35-year-

Inc., said that although valuebased pricing is an interesting concept, be would need more details before making a decision about it.

NetWeaver has the potential to provide something that software vendors have been promising for IO years in terms of creating complete workflows, but there are significant technical problems. said David Dobrin, an analyst at consultancy B2B Analysts Inc. in Boston, "You have to make sure the puzzle pieces fit together right," he said, "You can't just take a few pieces here and there and expect to make it all work.

Meanwhile, SAP also announced mySAP CRM 2005 at the user conference The new system includes enhanced marketing capabilities, including an e-mail resoonse management tool, and

service management improvements to let users automate the handling of warranties, returns and other processes. The CRM application is stated to ship in October. O 54537

N.J. Police Charge Nine for Stealing Bank Account Data Thefts allegedly involved bank workers, took place over a four-year period

BY TODO R. WEIRE Hundreds of thousands of electronic account records were altenedly stolen from four banks and sold to collection agencies and law firms by a New Jersey data-theft ring that included seven bank employees, according to police in the city of Hackensack.

The Hackensack Police Department last week increased the total number of customer accounts that allegedly were breached to about 626,000. That's up from the initial count of 500,000 records.

"This thing's getting bigger and bigger," Hackensack Police Capt. Frank Lomia said. 'It's still growing. The banks are uncovering more accounts than we knew about." The case has so far led to

criminal charges assinst nine people, and the Hackensack police are continuing their investigation into the alleged thefts by the group, which is believed to have operated for more than four years. The U.S. Department of the Treasury and the Internal Revenue Service also are involved in the investigation, police said.

siders Suspected

ers, police said.

The police department announced the arrests of the nine suspects on April 28. They were charged with illegally selling personal information stolen from bank and New Jersey state computer databases. The suspects captured screen images of som records and printed out oth-

old Hackensack resident set up an unlicensed company as a collection agency and a business for locating individuals who had defaulted on payments. He allegedly paid the bank employees to provide him with data about customers, including their names, account numbers and balances. The employees worked for Wachovia Corp., Bank of

America Corp., Commerce This thing's aettina bigger and bigger. . . . The hanks are uncovering more accounts than we

knew about

CAPT FRANK LOMIA HACKENSACK POLICE DEPARTMENT

Bancorp Inc. and PNC Bank NA, according to the allegations. None were IT staffers. Fran Durst, a spokeswoman for Wachovia, said the Hackensack police have released the names of 300,000 people whose information may have been stolen. Wachovia is notifving about 14,000 of its customers whose names were on

the list, she said. Bank of America basn't revealed the number of its customers who may have been affected by the data thefts. Spokeswoman Alexandra Liftman would say only that the bank has communicated with about 75 customers whose records are known to have

been accessed. A spokesman for PNC Bank said it has identified only 12 customers who might be affected. Officials at Commer Bank couldn't be reached for

comment last week. O 54542

Oracle Applications

On Demand

E-Business Suite \$150 Per User/Month

Your ERP and CRM applications run on our computers in our data center.



oracle.com/ondemand or call 1.800.477.6237

\$150 per user/month is solely for activists and hardware management services. Software ficense and support net excluded Terms, limitations, and restrictions apply

Command State Command Command Command Command on Advanced and Command Command

GLOBAL DISPATCHES

An International 11 News Digest

Fujitsu Expands Market For Biometric System TORYO

time forms from MAIs.

fierfals amora but works

• 17 July 29 3 4 Sabre to Pay S1B for U.K.'s Lastminute.com

LONDON

that Southhia Texas cuture the leaf

to close the requisition by the end of buly said Asian Telecom Carrier Taps Java for Operations

nontrovalar was fatchers (APD)

telecommunications sector. Heat in dustry is Store breaest vertical market elaballa O 54501

■ MARTEN WILL AME, IDENEWS SERVICE

Briefly Noted

daily newspaper reported last week that the government will gradually switch from Windows to the Linux gonration system on all PCs according to the Asence France Press news service. Roberto del Puerto, director ol the country's IT office, told the government daily that Cuba already has about 1,500 Lirux computers in place.

, based near Toronto, announced last week that BCEE (Banque et Carsse d'Eparone de l'Etat du Luxembourg), the largest bank in Luxembourg, plans to install its d2e document manage ment software. The Xenos software will be interrated with a content management system from EMC Corp.'s Documentum unit

firms based on different sides of the Atlantic merged last week. Trowbridge Group in Addison, Texas, and London-based ALS Consulting Ltd. said they have combined to form Alcheiden I td. uskich will from of-

fices in both locations.

continued from page 1 Summetry are three or four

FMC

tears ago," said John Hegner, services at Liberty Medical the "Use option the highest

Michael Berthamme. 1 West Kingston R.L. said his company recently replaced two older Symmetrix 8530 arrays with one high end DMX and one Christian CX700 array, achieving a "significant" return on investment the Chrisen error which

correspondent budget end lower cost Advanced Technol ogy Attachment disks, is used by Berthaums's short for arplications such as Lotus Notes Lore, and Suebel Systems In-The DMN are is as used almost exclusively for CRM applica-

In the quarter that ended Man h 51, sales of Clarinon systerms totaled \$400 million, or 17 - train \$285 million in the year earlier period Tirst auar ter 2005 vales at Symmetrix systems, in contrast, declined

5 - to Sect million Mark Lewis TMt Schief development efficer, said that movement of Symmetrix users to midratic systems

We use want to be charge embracers Tewn said "At the end of the day, bring it on Let it happen. The only risk you

abouts have is sticking your head in the sand? for I Schwartz general manager of FMC's midrange systems division, and that

while Symmetris will remain a standard for highly resilient and both throughout systems. he isn't troubled by the user

oraded Clariion

movement away from the line. "If you don't cannibalize courself, someone else will?

Financial Returns

manager at MidAmerica Bank in Clarendon Hills, III. said by thinks FAR's midrance and over the next lityears to be osme a single line based on the best of their technologies "The dual form tuctor is the

same If they merce then you only have one RAD cost that would be less," said Stonetus. whose bank has a mix of EMC's Symmetrix, Clarifon and Centera fixed-data arrays fors Priemore an analyst at

in Milford Mass, also said he thinks EMC will eventually move to a combined storage platform with a common set of code, storage applications and physical components. He eredicted that such a move by LMC would to company an industrivide convenience of

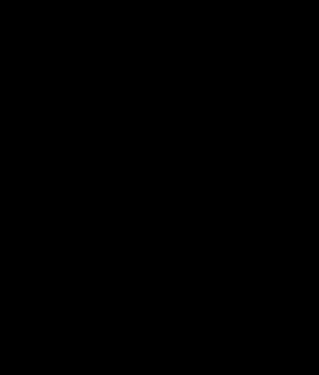
midrance and high-end systems Priemore pointed to IBM's Storage D\$8000 line of arrays and midrange systems that share common applications

and management software. We anticipate seeing that same thing with Hitsely Data

sense that users would stack with high-end arrays if they already had significant investments in storage software and staff trained to support those systems. But he added. The gap is closing here percer-

mon-wise 0 54521 MORE THIS ISSUE

technology in the third quarter Page 14





GI ORAL

An International IT News Digest

Fujitsu Expands Market For Biometric System

UJITSU LTD. last week announced that it will begin selling its palmvein biometric security system

outside Japan by the end of this year. The system, which uses the pattern of veins inside a person's hand to verify his identity has been nynilable in lapan since mid-2004 and is already being used in some high-profile appli-

cations. For example, The Bank of Tokyo-Mitsubishi Ltd., Japan's third-largest retail bank, began rolling out the technology last October in its 267 branches as an alternative to personal identifica-

tion numbers for ATM sactions, About half of the hank's 1,000 ATMs will have the system by

The product being offered by Tokyo-based Fujitsu includes a scanner that is similar to a digital camera but works in the near-infrared range, so it can detect

uses a proprietary algorithm to match the images produced by the scann to a database for verification, taking into account the number of veins. their position and the points at which they cross

MARTYN WILLIAMS, IDG NEWS SERVICE Sabre to Pay \$1B for U.K.'s Lastminute.com

ARRE HOLDINGS CORP., the open ator of Travelocity.com LP, announced May 12 that it plans to create Europe's largest online travel agency by acquiring London-based use.com PLC for £577 million

(\$1.08 billion U.S.).

GLOBAL FACT

Technically, the acoussition will be made by Travelocity Europe Ltd. an indirect subsidiary that Southlake, Texasbased Sabre established for the purpose of exe-cuting the deal.

Sabre, which expects to close the acquisition by the end of July, said that the combined Travelocity and Lastminute.

com business will have strong positions in the U.K., France, Germany, Italy. Scandinavia and Spain. ILAURA ROHDE, IDG NEWS SERVICE

Asian Telecom Carrier Taps Java for Operations OUN MICROSYSTEMS INC. last week

Sannounced that it will supply software and servers to KT Corp. South Kores's dominant telecor nications carrier, under a deal that Sun says advances the use of Java in that industry's back-end systems.

Seoul-based KT, formerly known as Korea Telecom, will use Java application programming interfaces (API), JZEE middleware and servers running Solaris to tie together the network management, provisioning and billing systems that support its natiouwide broadband network.

Sun and KT will jointly develop the operational support system, or OSS, as it's known among telecom carriers. The deal is part of Sun's "OSS through Java" initiative, which uses Java APIs to integrate components of operational and business support systems in the telecommunications sector. That industry is Sun's bissest vertical market

globally. O 54501 MARTYN WILLIAMS, IDG NEWS SERVICE

Compiled by Mitch Betts

Briefly Noted

non Orney Inc., based near rente, assessmed but wonk that EE (Baseum of Calous of Episeum Filled do Laconsburry), the

physical components. He predicted that such a move by EMC would accompany an industrywide convergence of midrange and high-end system

Prigmore pointed to IBM's release last fall of its Total-Storage DS8000 line of array which includes both high-end and midrange systems that

share common applications and management software.
"We anticipate seeing that same thing with Hitschi Data

Systems," he said. Priemore said it makes sense that users would stick with high-end arrays if they al-ready had significant investments in storage software and staff trained to support those systems. But, he added, "the

gap is closing here, percep-tion-wise." O 54521

INF THE ESSE

platform with a common set of CMC will ship its larg swated whether code, storage applications and incheigy is the bird quarter. Page 16

veins. The system then Continued from page 1 EMC

Symmetrix was three or four years ago," said John Hegner, vice president of technology services at Liberty Medical Supply Inc. in Port St. Lucie. Fla. "Except for the highest feature functionality, I don't

see a place for Symmetrix." Hegner manages more than SOTB of data stored in Clariion arrays. Liberty Medical doesn't use any Symmetrix ems, he said.

Michael Berthimme, a systems analyst at American Power Conversion Corp. in West Kingston, R.I., said his company recently replaced two older Symmetrix 8530 arrays with one high-end DMX and one Clariton CX700 array, achieving a "significant" return on investm The Clariton array, which

un use either higher-end Fibre Channel disk drives or lower-cost Advanced Technol-

ogy Attachment disks, is used by Berthiaume's shop for applications such as Lotus Notes and software from Oracle Corp. and Siebel Systems Inc. The DMX array is used almost exclusively for CRM applica-

tions, he said. In the quarter that ended March 31, sales of Clarison systems totaled \$419 million, up 47% from \$285 million in the year-earlier period. First-quarter 2005 sales of Symmetrix

systems, in contrast, declined 3% to \$652 million. Mark Lewis, EMC's chief development officer, said that the company is welcoming the ement of Symmetrix users

to midrange systems. "We just want to be change cers." Lewis said. "At the end of the day, bring it on. Let it happen. The only risk you

lways have is sticking your head in the sand." Joel Schwartz, general

mager of EMC's midran systems division, said that while Symmetrix will remain a standard for highly resilient and high-throughput system he isn't troubled by the user

movement away from the line. "If you don't cannib yourself, someone else will,"

Financial Returns Paul Stonchus, data center

manager at MidAmerica Ban in Clarendon Hills, Ill., said be thinks EMC's midrange and high-end arrays will merce over the next 10 years to become a single line based on the best of their technologies "The disk form factor is the same. If they merce, then you only have one R&D cost that would be less," said Stonwhose bank has a mix of

EMC's Symmetrix, Clarison and Centera fixed-data arrays. Tony Prigmore, an analyst at Enterprise Strategy Group Inc. in Milford, Mass., also said be thinks FMC will eventually move to a combined storage



Runs your business. Runs rings ground the competition

Intel[®] Each Procure gover, now approbably get one recognishing for ten crosp. The Procure MCISO Q years yor to prove and dealthy you need now when not you may not have also may not be not known from the product of the procure of providing one to great your specific procures of procure of the procure of procures of

HP PROLIANT ML150 SERVER







See ou	Save even more with HP Smart Buys. r site below for more choices and more savings.
CALL	1-866-625-3578
CLICK	www.hp.com/go/ML150mag4
VISIT	your local HP reseller



Place Sport and IF Direct press, results and regal register register register and press register or register in the press of the contract of the contract and t

Continued from page 1

Compliance

ence Corp. in Westwood. Mass., to manage the log data generated by its firewalls. Calpine later connected its other security devices and its routers and switches to the appliance, said Sean Curry, the company's infrastructure engineering manager.



and normalize Windows and Unix applicaquiring agents

to be installed on those systems. Curry said. That has made it ideal for com-

pliance reporting, he noted. Calnine began using the anpliance to collect information from the servers in January as part of an effort to streamline its Sarbanes-Oxley Act compliance efforts. Curry said the appliance now handles an av-

erase of 2,200 log items per second altogether. Adding to its appeal are functions that let Caloine's internal auditors directly generate the reports they need

without involving systems administrators. "We've been able to delegate the loss out of the systems administrator's control," Curry said.

Catholic Healthcare Part ners, a large bealth care system based in Cincinnati, is deploving a similar device made by Intellitactics Inc. in Reston. Va., to manage log data from

more than 2,000 servers spread across its 10 operating regions and two data centers. "If I spent five minutes per day looking at the logs from each system, it would take me

20 man-days per day to look at everything. It was just too unreasonable," said Tim Harrison, information security offi-cer at Catholic Healthcare. But the Health Insurance Portability and Accountability Act mandates that companies demonstrate that they have the necessary controls in place for protecting sensitive data. Harrison sold the Intellitactics appliance will eventually help Catholic Healthcare deal with roughly 100 million log items every day, including data gathered from all of the company's myriad security devices.

The appliance is expected to allow security teams and systems administrators to get detailed views of log information pertaining to their specific domains, he said. In addition, the company's auditors should be able to specify the kind of data they need to see for compliance purposes

Two-Pronged Approach Michael Gabriel, corporate IT security manager at Hoffman Estates, Ill.-based Career Education Corp., a \$1.73 billion provider of postsecondary edsecution, said there are two aspects to auditing internal con-

trols on end users' access to systems and data. "There's the part that deals with the collection of the data. and there's the part that deals

User Demand Sparks Vendor Changes THE INCREASING USE of SUCU-In March, Network Intellige paraded its enVeion secur city exent and information men event menagement suits with a agement appliances for re-

ry compliance reporting is promoting some vendors to hweek their product develop and marketing strategies.

Last week, for instance, San lose-based NettO Corp. announced compliance-oriented ensions of its security event management products. Its Secu-nty Compliance Suite comes in two flavors and features a new log-management component and templates designed to help comnories assess and report on th compliance with laws such as the Sertunes-Oxiey Act, HIPAA and the Gramm-Leach-Billiny Act.

with the mining of the data for useful information," Gabriel said, "If you aren't duing the first one right, the second

Career Education is using a product from Edison, N.J. based NetForensics Inc. to collect about 6 million log items

per day from its systems. The

ance standpoint," said Scott Crawford, an analyst at Enterrupting applications. Michael Berthiaume, a sys

tems analyst at American Power Conversion Corp., said he's interested in Invista because it could eliminate planned downtime in data migrations of applications like Lotus Notes, Oracle and Siebel from high-end systems to

board and functions for gether

log information from a wider set of sources, including EM's olde

OS/390 mainframes and AS/400

run Microsofi Corp.'s Internet in

Market forces are driving the changes, said Jim Melvin, vice

sent of marketing at Not-

ion from frewells and intru

work intelligence. The tools were once used purely for collecting in-

sion-detection systems to sup-port IT security efforts, Melvin

said. But over the past two quar-

technology has "put us in a

ed controls," Gabriel said.

position where we can dem-

onstrate we have all the need-

centralize reporting capabili-

from an anditing and compli-

ties is one of their chief values

formation Services software.

ms and Web servers that

midrange systems for better price performance. Product Plans

According to Lewis, the first version of Invista will reside on FMC's own Connetrix switches, Cisco Systems Inc.'s MDS line of switches and Brocade Communications Systems Inc.'s multiprotocol switches. It is expected to be available on McData Corp.'s

switches in early 2006. The excitch-based virtualization firmware will support all of EMC's Clariton and Symmetrix storage offerings, as well as systems from Hewlett

has been matched by interest from companies looking to use the products for compliance reporting, he said Parn Casale, vice president of

coliferni te tnemegenem buboro tics, said the company added fee tures for automating log mon ing and reporting in April after t also started seeing increasing de nd for such capal It's changing the way we do velop products," said Tom Fole-dare, senior director of business gment at NetForereics.

Now we worry about asset grou ing able to take every server that is dealing with a SOX issue and put them into different groups

prise Management Associates Inc. in Boulder, Colo. Gartner's Williams noted that the technology's support for collecting information "The ability of these tools to from virtually any source has made it ideal for monitoring activity on sensitive systems such as accounting and human resources. O 54539

Data Systems Corp., according

to Lewis. Nancy Hurley, an analyst at Enterprise Strategy Group Inc. in Milford, Mass., said that while EMC is the last of the leading vendors to release a virtualization product of this caliber, the gradual adoption of virtualization technologies will allow it to gain adequate market share. IBM, Network Appliance Inc., HP and Hitachi are already selling com

petitive systems. Mario Arbelaez, a stor engineer at software vendor Acxiom Corp. in Little Rock, Ark., said he would like to evaluate Invista because migrating data when upgrading storage management software causes application downtime. Arbelsez, who has store from HP. IBM. Storage Technology Corp. and EMC, said Invista's \$225,000 price tax isn't too expensive "when

EMC Sets Pricing, Availability Of Virtualization Technology development officer at EMC.

FMC Corn formally announced a shipping schedule for its lone-awaited storage virtualization technology last week at its annual user confer-

ence here EMC officials acknowledged that the availability of Invista, code-named Storage Router, is a quarter behind schedule. Company executives attributed the delay to "com-

mon" development issues. Users interviewed last week downplayed the delay, saying that they are in no rush to implement the technology, which is priced starting at \$225,000. The new Invista system will reside on products from three leading switch vendors and will be generally available next quarter, said Mark Lewis, chief

Paul Stonchus, a data center manager at MidAmerica Bank in Clarendon Hills, Ill., said that he has EMC Symmetrix Clarison and Centers arrays in his data center and would eventually like to use Invista to

migrate data across arrays. But he noted that he's not yet ready to "reinvent the wheel." "I'm intrioned by it." he said *Once we decide to cross our Clariton and Symmetrix (environments), it will make all the

sense in the world. But for now I'll wait for Rev. 2." Speaking at EMC's Technolney Summit here, Lewis told about 4,000 attendees that vista will be most valuable in migrating data off aging systems or from one box to another during software up

grades in order to avoid dis-Packard Co., IBM and Hitachi

you're talking trying to mi-grate 25TB of data." © 54519



in the next big dealwithin everyone's reach

SAS and Intel give PFIZER HEALTH SOLUTIONS INC The Power to Know

how to help its clients provide effective healthcare to more than a helf-million patients. Read our success story at www.sas.com/phs Power uses here been taponing into SSS unrestituted breath and distint of analytics for years to drive their operationations forward loss environation or come from anyons, anyonime in your company. While most Bit ventrion deliver historical monthing consistency. SSST business intelligence and enalytics software – on tracell fraudria? I possible produces housed service — reprovers you to predict outcomes and make more effective decisions forward business. SSS takes you Beyond BIT by making it easy to put the power to know his hall back of everyors.

go Beyond Bi" at www.eas.com/Bitour o Free product tour



Ssas.

A Matter of Image

OW'S THIS FOR BAD IT CK. You're a bank, and your check-sorting machine goofs up and puts canceled checks in the wrong statement envelope so they're sent out to the wrong customer. How's this for worse luck? The wrong cus-

tomer is a journalist. Me. You are otherwise to a openical new bands state ment a congress of weeks age, and rough from all refer, bede that weren! mus. They he is vien scrince be another his somes ben, in Massachu setts i person well call toan Doy! Well cale ber that society reasons First 1 on his over name screna. Jan Disc p win netword

Now from these checks here's what know about toan Het name. busband's name address bemephone number driver's license num ber and expiration date date of birth and checking account number 1 also have few signature samples Oh and know where lear-likes a shop and

that she has a kid aiking gymnastics. This commonwer of loon's nerson at information was had news - not only tog team but for the pank whose mistake allowed the happen City zens Bank, an arm of Citizens Finan continue Inc in Privatence R.L. is owan, that any bank - lateblook is the confidence of its customers and that includes confidence that personal presact will be presected

So how does something like this happen: According to Avoub Litan an analysi at Gartner Inc. it's "stop py work' that's 'really mescusable Litan contends that banks, checkprocessing resources fan being fun neled in electronic image capture at the expense of the manual checkhandline process

Interesting that Litan mentioned electronic transc capture. It so hapnens that my statement a bestingtiers agency de-Prochare inviting no in ore on the karmanna The brochure premoted the service, which would provide illiages of the books on hi statement cather than the sans elecchecks themselves as one that would breduce the risk of misplacing a canceled check 1 don't think they were referring

or the risk of the bunk misplacing it but consenthe idea The wood news is that when? intormed the bank of the breach the matter was taken seriously. A speckers coming sour loan would be notified immediately receive an mology and by seven the option of closmy her account and opening a

discuss the goot-up Wray extraous dian r diminish dis

scripusics of the ompromise but he dismissed the notion of a being a resource allocation issue. He esplanned that when you have around 5 million ohroks maning through electromechanical sorrers nightly or very rate occasions the backs might and another on by author or the wrong envelope. What moved that with stock imaging, diere's virtually tio chapter for this to happen, and there's an infact transf management benefit since investigators car meimmediate as essay check images Seems a me that going the imaging none is a no brainer

It makes my wonder why Masse chiesette law requires customers to opt notor check imaging while all the other states in which Citizens Rank does business require custom ers to ope out if they want to comin ne receiving their canceles paper checks instead. Given that from s checks could easily have ended ut in even worse hands than mine. Ld say this is a case when opt-our is clearly the superior approach @ 54470



A DATA SECURITY PROMOTION FROM OUR BANK THEY SHAP US SOMEONE BISH'S PANCELLED CHECKS

Riding the Wave to a Perfect Day

OU'VE HAD one of those days. No. not one of those days that cause you to wonder why n the world you ever chose mathematics and marketine it comcontinues out abund autrepole ay No. 1 the one of those day wher of all-comes ogether who the major to - during top - pursue and autophysical

Or days like this you thank of the people on your usua who much this has ever admirting their deshyation and persistence. You also think of the own ers of the present from the best of marketing is the part-time customer screen for who dod

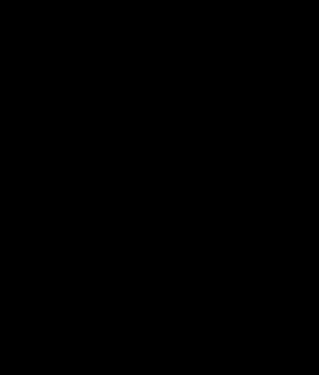
surrors is make surr solid business case ments You ever re member back with assemine meeting when this corricular project was chosen 11 WASHINGTON STORY IN DE vass but that if you

could get it done your make the compans even mon competitive You knew it was given to be a great property And they along come unother great project. It was also entical to the compages 5 success, and it quickly became clean that you nevel of to do both. But

that was UK you figured because the first project about by over months shead of the second Then stuff began to happen. A month into the work, you left as if both

projects wen slipping through your finizers. Diseas both at since and main taining normal work was straining the resources of the rest of the company. First, the business requirements came in just under the wire. Then the vendors made offers that you could refuse and resentations with legal never sympet to done much an end. The secand month went by, and then the third Soon it became apparent that both





DON TENNANT

A Matter of Image

OW'S THIS FOR BAD LUCK? You're a bank, and your check-sorting machine goofs up and puts canceled checks in the wrong statement envelope so they're sent out to the wrong customer. How's this for worse luck? The wrong cus-

tomer is a journalist. Me. You can imagine my befuddlement when I opened my bank statement a couple of weeks age and found five canceled checks that weren't mine. The checks were written by another customer here in Massachusetts, a person we'll call "loan Day." We'll call ber that for two reasons: First it's not her real name, second, "Jane Doe"

is way overused Now from these checks, bere's what I know about loan: Her name, husband's name, address, home phone number, driver's license no ber and expiration date, date of hirth and checking account number. I also have five signature samples. Oh, and I know where loan likes to shop, and that she has a kid taking gymnastics.

This compromise of Joan's personai information was had news - not only for loan, but for the bank whose istake allowed it to happen. Citizens Bank, an arm of Citizens Finan cial Group Inc. in Providence, R.L. is. aware that any bank's lifeblood is the confidence of its customers, and that includes confidence that personal privacy will be protected

So, how does something like this happen? According to Avivah Litan, an analyst at Gartner Inc., it's "slop py work" that's "really inexcusable." Litan contends that banks' checkprocessing resources "are being funneled to electronic image capture at the expense of the manual check-

andling process." Interesting that Litan mentioned electronic image capture. It so hap-

envelope contained a brochure inviting me to not for check imaging. The brochure promoted the service, which would provide images of the checks on the statement rather than the canceled checks themselves, as one that would "reduce

the risk of misplacing a canceled check," I don't think they were referring to the risk of the bank misplacing it. but you get the idea

The good news is that when I informed the bank of the breach. the matter was taken seriously. A spokeswoman said loan would he notified immediately, receive an apology and be given the option of closing her account and opening a new one. Commendably, moreover.

he dismissed the notion of it being a resource allocation issue. He explained that when you have around 5 million checks running through pens that my statement

discuss the goof-up.

electromechanical sorters nightly, on very rare occasions the checks might stick together and be stuffed in the wrong envelope. Wray noted that with check imaging, there's virtually no chance for this to happen, and there's an added fraud-management benefit, since investigators can get immediate access to check images Seems to me that going the imaging route is a no-brainer

Wray certainly didn't diminish the

seriousness of the compromise, but

It makes me wonder why Massachusetts law requires customers to opt in for check imaging, while all the other states in which Citizens Bank does business require customers to get out if they want to continue receiving their canceled paper checks instead. Given that Joan's checks could easily have ended up in even worse hands than mine. I'd say this is a case when opt-out is clearly the superior approach @ 54470



IT'S A DATA SCLIRTTY PROMOTION FROM OUR RANK THEY SENT US SOMEONE BLSG'S CHICGLED CHECKS." VIRGINIA ROBBINS

Riding the Wave to a Perfect Day

TOU'VE HAD one of those days. No. not one of those days that cause you to wonder why in the world you ever chose mathematics over marketine or computer science over cultural anthropolo so. No. it was one of those days when it all comes topether, when the major installation hits and - deer breath -

actually works. On days like this, you think of the eople on your team who made this happen, admiring their dedication and

persistence. You also think of the owners of the project, from the head of marketing to the part-time customer service rep. who dedicated time and resources to make sure that your people had a solid business case

and good requirements. You even remember back to the governance meeting when this particular project was chosen. You knew then that it wasn't going to be easy but that if you could get it done,

you'd make the company even more competitive. You knew it was going to be a great project. And then along came another great project. It was also critical to the com-

pany's success, and it quickly becam clear that you needed to do both. But that was OK, you figured, because the first project should be over months ahead of the second

Then stuff began to happen A month into the work, you felt as if both projects were slipping through your fingers. Doing both at once and main taining normal work was straining the resources of the rest of the company. First, the business requirem in just under the wire. Then the vendors made offers that you could refuse and negotiations with legal never seemed to quite reach an end. The sec ond month went by, and then the third

Soon it became apparent that both



Juniper your Net.



"We're fram the Future, Stanley, and whether you like it or not, you're the chosen one, the change agent who's going to save this Sinking netwirk. So, diop the denut and get aheld of Juniyer."

NETWORK EXCELLENCE

J-Series & JUNOS, Always Performance Perfection.

Are you sinking in a patchwork of network complexity? Can you count on your network to deliver the security and predictability that your business needs to move to lote? or to un networked EPP application? Or to gain the flexibility and cost advantages of moving remote and branch office connections from leased line to IPSec VPP?

Simply leave the Status Quo for uncrecedented amplicity, predictability and platform independence. Jumper's Jaestes. The Jaenes, and our modular AMAS operating system, in perfect for estended and distributed enterprises with business carboal application, ensuring supports security and quality over a converged P indevice. Now foresteroid-linking enterprises, operament organizations and research & education groups have a better

- atternative in forward-looking platforms:

 Superior Security: Dedicated resources offer the most advanced defense from outside threats while giving you complete control, even under attack. Add new filters and
- threats while giving you complete control, even under attack. Add new titters and policies directly, quickly, easily.
- Unprecedented Uptime: JUNOS architecture allows multiple functions to run independently, leeping minor issues from becoming major problems, and leeping interpresses (and network managers) secure – in fact, just lint "resous" for speedy system recovery. What's more, our ned generation CU means accurate configuration. Legacy "routes" can only wish for parallel multi-function escaletons.
- Legacy "routers" can only wish for parametric for the control of the
 - applications receive top resource priority, so you may oil incredible control and throughput during
- the most demanding times.

and upgrades.

 Reduced Operational Complexity & Costs: Our clean-code configuration and consistent release schedules require minimal effort to set up and maintain – no wasted time on constant patches



SPECIFICATIONS Platform	12300	14300	#6300
See	111	2U	20
Site Connections	2xF1/E1/Serial	2X11/E1/Senal to 8x11/E1	2xT1/E1/Senal to 053
Fixed LAN Ports	261	26FE	2/FE
WAN interface Siots	0/4	6 Open Siots	6 Open Slots
Fixed WAN Interfaces	2xE1 or 2xE1 or 2xServal	N/a	n/a
WAN Interface Modules	s/a	2xT1/2xE1/ 2xSensi/2xFE	2xT1/2xE1/ 2xSerial/2xFE/DS3
Memory	256 or 512 MB DRAM	256 or 512 MB DRAM	256/512/1024 MB DRAW
Redundancy	No	No	Power
Additional Software Licenses	Statelyl Firewall, IPSec. J-Flow Accounting, BGP Route Reflector	Statetul Firewall, IPSec. J-Flow Accounting, BGP Route Reflector	Stateful Firewall, IPSec. J-Row Accounting, BGP Route Reflector

CARRIER-CLASS PERFORMANCE & SECURITY, READY FOR YOU.

Tired of old answers? Take a look at the future: www.kastper.net/products/jseries/

888-JUNIPER (888-586-4737)

www.lunkper.net



2005 Junger Networks

projects would launch in the same month. The team started talking abo a perfect storm. You kept thinking out the movie - don't they all die in the movie? It could indeed be a perfect em, at least for your career.

Then early code releases were deliv ered. The business owners started to get excited. The buzz among them was that this was going to be a killer app. Right then in the meeting you started thinking, Just what I need - the killer app in the perfect storm. There were far too many references to death, and your inward chant became "Live, project, live!"

But that's when the team started to hit its groove. Technical issues arose but were quickly resolved. Testing conrinued, with bugs getting worked out faster than QA could keep up with their documentation. Early soft launch es for both projects were discussed and approved. The soft launches hit. experienced a few bumps but went on. And today, when you launched, it

was smooth sailing. No perfect storm just two killer apps riding the waves. Now, as you're walking down the hallway feeling relieved, you glance at your BlackBerry and see an e-mail from the CFO. Apparently there is a

concern in accounting. ou craft your polite response to the CFO, cc'ing the project manager. The project manager bolts out of a meeting, finds you and tells you that yes, accounting had recently expressed so reservations, but it had signed off on the process a month asp. The project manager and the CPO straighten everything out, and 90 minutes later there are no more concerns in accounting. You finally breathe, head back to the hotel and call hore It's been a great day. O 54412

DAVID MOSCHELLA

IT at the Front of Your Company

TOW MANY TIMES over the past year have you heard someone proclaim that blogs, particularly in conjunction with

RSS, are the pext big thing? The latest and loudest of these assertions came from Business Week. The cover of its May 2 issue screams in giant red type that "blogs will

change your business." After all, they brought down Dan Rather.

Although it's easy enough to deflate some of this bype. a more practical exercise is to try to ask what blogs. RSS, podcasts, peer-to-pe and the whole "smart mob" movement might mean to corporate IT. Perhaps not

surprisingly, the answer is "It depends," a response that isn't as equivocal as it might first appear. Examperations aside, it's

true that the explosion in blog usage is evidence of a significant new IT frontier. For many years, IT was primarily used to automate the flow of records documents and communication inside your organization. Then, with the Web's arrival, direct links with customers and suppliers proliferated. This latest set of tools and services has the ential to capture the conversations, feelings and activity of your actual etplaces. Essentially, a new plat-

form is emerging at the very front of your company. As I have argued several times in this column, the task of IT value cre ation is becoming the responsibility of not only IT suppliers and departments, but also customers themselves. Busi-



ness books and journals now promote concepts such as co-evolution, cotion, customer exp ence and democratic inno vation. That speaks to a trend that feels fuzzy today but will likely appear obvious within a few years. uccessful companies will find ways to harness the energies of their customers, as the open-source

movement already has. That the significance of these ideas depends upon the business you're in is nothing new. Clearly, industries such as health care.

entertainment and automobiles tend to have more-active communities of customers than, say, canned foods. But it's not hard to imagine that within a few years, forward-thinking companies in an impressive range of sectors will have real-time systems that cupture, map and respond to the way their products and services are being used. evaluated and discussed. Such system could render many traditional forms of

rket research obsolete.

And for corporate IT, that is the rub What role, if any, will you play in influencing the development of systems that will principally serve the needs of marketing, product development and

customer service, but often with little direct connection to the back-end transaction systems managed by cor porate IT? Just as marketing typically controls the company Web site, it will also take the lead on these high-profile and often experimental initiatives. The question is whether it will look to corporate IT for help or decide that the expertise it needs resides elsewhere One of the misconceptions resard

ing the use of outsourced services is

that they are best suited for low-value. back-office activity. But high-value services requiring scarce capabilities can be an equally attractive option. A whole new set of enhanced search business intelligence and patternrecognition suppliers is emerging th will be at the cutting edge of front-ofthe company technology deployment My company's research shows that when it comes to the IT organization's relationships with key company domains, the most fractious is often with marketing. Whether corporate IT will play a big role in the customer-driver

world of the future will largely depend

upon whether this relations WANT OUR OPP

comes more closely aligned. O 54405

READERS' LETTERS

Cohen is Right: Visas Are Wrong

SAMK YOU for doing the int wew with Gerry Cohen ["Q&A matten Builders CEO Blests tes" H-18 Stand," QuickLink 543431 This ow is an American hero for sticking to his guns and cking the popular trends. But most of all, he is a hero for being willing to stick out his neck and to the IT industry that H-IB and L-I

vises are the wrong solution for this

Cohen says many of the things that the members of Technilinite and rymeryGuild have been say ing for years - there is no shortage of workers, and the more that indusds the importation of cheep labor, the worse the overall (T

entry is going to tare in the U.S. hen built from the ground up, is one of those rare companies that acts dy while at the same time trying to derive the greatest return for

customer of IBI. It's becoming clear to me that if a the kind of come that I want to be a customer of in the latered

Walt Creeby Executive vice president. Terabase Corp., Donwers, Moss. walt@erabase.com

Apple's Just Another ed Monopoly . . . HIS letter to the editor about

Microsoft and Linux, Daniel Roiss wrote, "Better yet, switch to Apple. Better hardware, better operating system, better use of open-sor and no threat of biguiton from SCO or Microsoft" [QuickLink 52909]. Whether or not the states

concerning hardware and oper pustern are true, there is a major blem with this advice. Moving inne Manusoft to Apple at New autoing out of the laying pan into the fire.
You have only tracked monopolies. that controls the operating syste and software to one that controls the hardware and operating mate You have gone from one stratuch to another. You may be better off for a while, but eventually you will be in trouble because you are in a closed. controlled, monopolistic system.

arrestly, the poly visible alternal is Linux, open systems and a visitely of hardware. George Washi Marion, Ala.

... And It Charges Big Bucks for 'Cool' WHOLEHEARTEDLY AGREE ion about the features on Apple's new Tiger operating system: They

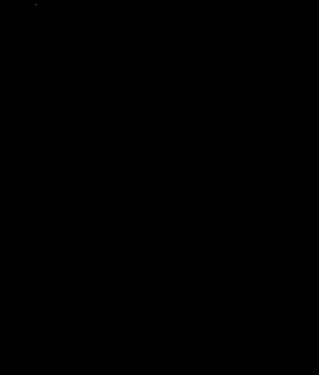
are cool l'Apple Takes Major Lang With Fram * QuickLink 539561. What he hasn't worked out, app ently, is that corporate America. doesn't went to pay for cook

more money from your pocks most other manufacturers, and the is more proprietary than Micros has ever been, yet it still wonders why its market share doesn't increase by leaps and bounds I'm sorry, but you are going to

have to convince me that Apple has shed its enchanges before I will even Rob Silvano Enterprise architect, Selaide, South Australia

COMPUTERWORLD welcome comments from its readers. Letters will be edited for brevity and clarity They should be addressed to Jerse Edde, letters editor, Com-puterworld, PO Box 9171, 1 Speci Street, Framingham, Mass. 01701. Fax: (508) 879-4843, E-mail: lettersificomputerworld.com. Include an address and phone member for immediate verification





projects would founch in the same month. The team started talking about a perfect storm. You kept thinking about the movie - don't they all die in the movie? It could indeed be a perfect storm, at least for your career

Then early code releases were delivcred. The business owners started to get excited. The buzz amone them was that this was going to be a killer app. Right then in the meeting you started thinking Just what I need - the killer app in the perfect storm. There were far too many references to death, and your in ward chant became "Live, project, live!"

But that's when the team started to hit its groove. Technical issues arose but were quickly resolved. Testing continued, with bugs getting worked out faster than OA could keep up with their documentation. Early soft launches for both projects were discussed and approved. The soft launches his. experienced a few bumps but went on

And today, when you launched, it was smooth sailing. No perfect storm, just two killer apps riding the waves. Now, as you're walking down the hallway feeling relieved, you glance at your BlackBerry and see an e-mail from the CFO. Apparently there is a

concern in accounting. You craft your polite response to the CFO, cc'ing the project manager. The project manager bolts out of a meeting, finds you and tells you that yes, accounting had recently expressed some reservations, but it had signed off on the process a month ago. The project manager and the CFO straighten everything out, and 90 minutes later there are no more concerns in accounting. You finally breathe, head back to the hotel and call home It's been a great day. O 54412

DAVID MOSCHELLA

IT at the Front of Your Company

OW MANY TIMES over the past year have you heard someone proclaim that blogs, particularly in conjunction with PSS are the next ble thing?

The latest and loudest of these assertions came from Business Week The cover of its May 2 issue screams in giant red type that "blogs will

change your husiness." After all, they brought down

Dan Rather. Although it's easy enough to deflate some of this lype. a more practical exercise is to try to ask what blogs.

RSS, podcasts, peer-to-peer and the whole "smart mob" movement mucht mean to corporate IT. Perhaps not surprisingly, the answer is "It depends," a response that isn't as equivocal as it might first appear.

Examerations aside it's true that the explosion in bloc usage is evidence of a significant new IT frontier For many years. IT was primarily used to automate the flow of records. documents and communication inside your organization. Then, with the Web's arrival, direct links with cus tomers and suppliers proliferated. This latest set of tools and services has the potential to capture the conversations. feelines and activity of your actual marketplaces. Essentially, a new platform is emerging at the very front of

your company. As I have argued several times in this column, the task of IT value creation is becoming the responsibility of not only IT suppliers and departments, but also customers themselves. Busi-



ness books and journals now promote concepts such as co-evolution, cocreation, customer experience and democratic innovertican. That emerks have trend that feels fuzzy today has will likely appear obey ous within a few years. Successful companies will find ways to harness the energies of their cus tomers, as the open source

movement already has That the significance of these ideas depends upon the business you're in as nothing new, Clearly, industries such as health care entertainment and automobiles tend to have more-active communities of cus tomers than, say, canned foods. But it's not hard to imagine that within a few years, forward-thinking companies in

an impressive range of sectors will have real-time systems that capture. map and respond to the way their products and services are being used evaluated and discussed. Such systems could render many traditional forms of And for corporate IT, that is the ruly

What role if any will you play in influencine the development of systems that will principally serve the needs of marketing, product development and

customer service, but often with fittle direct connection to the back-end transaction systems managed by corporate [12] Just as marketing typically controls the company Web site, it will also take the lead on these high-profile and often experimental initiatives. The anestron is whether it will look to corporate IT for help or decide that the expertise at needs resides elsewhere

the of the misconceptions regardme the use of oursourced services is that they are best suited for low-value. back-office activity. But high-value services requiring scarce capabilities can he an equally attractive option. A whole new set of enhanced search, business intelligence and pattern recognition suppliers is emerging that will be at the cutting edge of front-ofthe-company technology deployment.

My company's research shows that when it comes to the IT operations. relationships with key company domains, the most fractious is often with marketine. Whether corporate IT will play a big role in the customer-driven world of the future will largely depend gron whether this relationship becomes more closely aligned. O \$4405

WANT OUR OPINION?

More cohomosits and links to archives of removes cohomos are on our Wint star.

Cohen Is Right: Visas Are Wrong ANK YOU for doing the interview with Gerry Cohen FD&A

Internation Builders CFO Biasts Gates' H-18 Stand," QuickLink 541431. This gay is an American hera for sticking to his guns and bucking the popular trends. But most of all the is a hero for borno willing to stuck out his neck and tell the IT industry that H-IB and L-I

visas are the wrong solution for this Cohen says many of the things

that the members of TechsUnite and ProgrammersGuild have been say: no for years. - there is no shortage of workers, and the more that inclusby demands the importation of chean later, the worse the overall (T industry is going to fare in the U.S.

Information Builders, which Cohen built from the around up, is one of those rare companies that acts ethically while at the same time tryno to dense the prestest return for es stockholders. In the past, I was a customer of IBI It's becoming clear to me that it's the kind of company that I want to be a customer of sti

Walt Crosby Executive vice president Terabase Corp. Denvers, Mass. walt a terahase.com

Apple's Just Another Closed Monopoly . . . B M MCS letter to the editor about

Microsoft and Linux. Daniel Ross. wrote. 'Better yet, switch to Apple Better hardware, better operating system better use of open-source and no threat of Impation from SCO or Microsoft" (Quark) sek 529091

concentrate hardware and operating system are true there is a main problem with this advice Moving from Microsoft to Apple is fike sump. ing out of the frying pan into the fire. You have only traded monopoles.

You have gone from an organization that controls the operating sustern and softwere to one that controls You have gone from one strafacket to another. You may be better off for a white, but eventually you will be in trouble because you are in a closed controlled, manapolistic system Currently, the only viable alternative

is Linux, open systems and a waterly of hardware George Washburn Marriage Alex

. And It Charges Big Bucks for 'Cool' WHOLEHEARTEDLY AGREE

with Michael Gartenberg's opinon about the leatures on Apple's new Tiger operating system. They

are cool ["Apple Takes Major Leap With Tiper * QuickLink 539581. What he hasn't worked out appear ently, is that corporate America. doesn't want to pay for cool Annie consistently extracts

more money from your packet than is more prometery than Microsoft has ever been set if still wonders. why its market share doesn't incanary by leags and bounds I'm sorry but you are going to have to convince me that Apple has shed its exclusivity before I will even

get interested again Bob Sibson

Experience architect Adelande, South Australia

COMPUTERWORLD welcomes comments from its readers. Letters will be notifed for brevily and clarity They should be addressed to Jame Eckle letters editor Comneterworld, PO Box 9971, 1 Speed Street Framingham Mass 01701 Fax (508) 879-4843 E-mail letters/innersystementd.com include an address and phone







"We conducted stringent testing and chose the Microsoft" solution for its unified stock, which sowe time and money on integration and maintenance. These factors combined to give the Microsoft stack a 24 percent lower total cost of ownership compared to other solutions."

> - Randy McCoy, CTO, CheckFree Corporation

Checkfree Corporation power millions of financial transactions daily for brousands of financial institutions. As home to one of the world's largest databases, they needed to reduce their cost per transaction while manitaring performance and quality. So they conducted a stringer benchmark test of an IMS solution stack including field this may IBM DIS, and JZEF against a hidrosoft solution featuring Windows Server 2003, 5QL Server 2000. and the NET Finances Eceasure the Microsoft stack delivered JMF faster transaction rates and 24% better TCQ. Checkfree chose the Windows' platform for the next exercision of their investment Services platform

To get the full case study, other case studies, and other third-party findings, go to microsoft.com/getthefacts





TECHNOLOGY

Rounding Up Business Rules

Organizations are finding that business rules engines and management systems can automate enforcement of the rules necessary to make processes run smoothly. IT leaders such as Donna Ramos-johnson explain how. Page 24

SECURITY WANAGER'S JOURNAL Protecting Consumer Data on the Cheap

A mandate to protect personal data in the state agency's databases isn't accompanied by any extra funds, so C.J. Kelly has to come up with an inexpensive way to do it. Page 30

Coming: Sensors and Pixels Everywhere

Accenture's Anatole Gershman discusses ongoing work on intelligence technologies that are aimed at connecting IT systems with the physical world. Page 34



Pick Vunerability management technology allows companies to change in the companies of the companies in the companies of the companies in the companies in the companies of the companies in the companies in the companies of the companies in the companies of th

which can be middly got of the best best. The above most of which middle is the same of th

Institute of Co., the second of

SOFTWARE AND SERVICES

Vulnerability and asset classifica-

tion, as well as risk metrics, are needed

to help companies prioritize responses

Mitigation and blocking measures

threats for which software updates or

other fixes may not be insmediately

available. And monitoring and mea-

surement processes are crucial to en-

sure that fixes and changes that have been made remain in place.

Detection and Remediation

A good management process helps

the network vulnerabilities that really

matter, says Derek Milron, a security

architect at Career Education Corp. (CEC), a \$1.73 hillion company in

Hoffman Estates, Ill., that runs post-

A vulnerability management system

allows companies to collect informa-

tion on and understand various threats to corporate networks, and it shortens

the reaction time needed to deal with

secondary education programs.

communies identify and remediate

may be needed to deal with some

them, he says. Also important, it envulnerability management process. users say. Fundamental to the effort ables IT administrators to focus their time and resources on only the prob-They belo companies discover netlems that need fixing. Milroy says, work assets and any software holes or It really is the core central instruconfiguration errors that mucht exist mentation that enables a security function to operate within the optamiza-

tion," says Robert Garigue, chief information security officer at the Bank of Montreel in Toronto Radunz has adopted several measures for managing vulnerabilities on its networks and systems. The company doesn't do too many routine vulnerability scans, Hession says, But when it

does, it looks for known software holes as well as configuration errors, roose explained he says

tems into various groups depending on their importance to the organization. Critical financial and human resources systems and those belonging to senior executives, for instance, get fixed tant. Most of the company's desktops have best finewalls for desection and blocking intrusions at the client level.

"This way, even if there are any vulnerabilities on those systems, they are not directly exploitable because of the fact that the personal firewalls are blocking it," Hession explains.

It buys you some time to go out and rough systems." Asset and response prioritization is a key aspect of any vulnerability man-

assement stratumy. Million says. Categorizing Assets

For the past nine months, CEC has been using an on-dentand service from Quales Inc. to perform asset discovery. asset prioritization, vulnerability assessment and analysis as well as remedistron

Like many other companies, CFC has organized its network assets into multiple security categories. It rates those categories from 1 to 5 depending on their importance to enterprise opcrations. Data center servers and those running crucial databases and revcause penerating applications, for in

You need to have a understanding of what the tools are trying to tell vou before vou go to the business side and ask them to fix things.

ROBERT GARIGUE, CISO BANK OF MONTREAL

stance, are considered Category 5. while some rarely used file servers mucht be a Category I Sumfarly, vulnerabilities are color

coded depending on their severity. with not being the most entired. CFC nurs weekly sulnerability scans of its network and prioritizes its responses based on asset importance and vulner-

A vulnerability in a database server hat can be remotely exploited or for assigned a Red 5 rating, which means that it needs to be fixed immediately,

shillin sensents

In some cases, a serious vulnerability mucht exist in a critical system but there may be no immediate threat directed against st, in which case it may he better to do a more planned remediation rather than risk the discustion of

an immediate fix, he says. Realistic Strategies

CEC largely depends on vendor classifications to determine the severity of vulnerabilities, but it also uses its own internal filters and analysis to determine whether an issue is really critical.

"I'm trying to keep it realistic. All you really care for are the Category 5 vulnerabilities," Milroy says, "Con you not the muchine? Can it get hit by a worm? Is it remotely exploitable? Key to a good vulnerability manage-

the various intendependencies that exist between systems on your network. says Ed Cooper, vice president of product management at Skybox Security Inc., a Palo Alto, Calif-hased vendor of

risk management software Sometimes, for instance, fixing the problem on a single upstream server or router may be all that's needed to mitigate the risk posed by a vulnerability on multiple servers, he says,

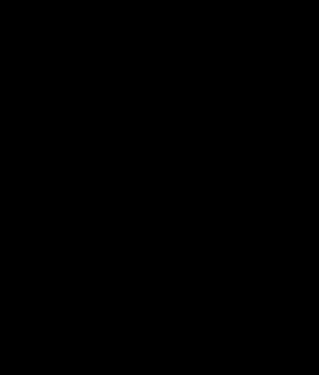
Knowing precisely which holes to close on which server or workstation can tremendously reduce response times and help focus effort on the real

threats Council was Skybox offers a tool that allows a company to build virtual models of its entire network that it can use to simu-

lite attacks and understand the potential consequences of vulnerabilities. Often, the risk a vulnerability poses to a system might need to be balanced aminst the notential business disrunion or revenue loss that might result from taking the system down to fix it. says David Giambruno, director of strategic infrastructure and security at Pitney Bowes Inc., a \$5 billion mail and document management firm

in them

to the threats.



vulnerability management process, users say. Fundamental to the effort are vulnerability assessment scans. They belp companies discover network assets and any software boles or configuration errors that might exist

Vulnerability and asset classification, as well as risk metrics, are needed to belp companies prioritize responses to the threats.

Mitigation and blocking measures may be needed to deal with some threats for which software updates or other fixes may not be immediately available. And monitoring and measurement processes are crucial to en-sure that fixes and changes that have been made remain in place.

Detection and Remediation

A good management process helps companies identify and remediate the network vulnerabilities that really matter, says Derek Milroy, a security architect at Career Education Corp. (CEC), a \$1.73 billion company in Hoffman Estates, Ill., that runs post-

A vulnerability management system allows companies to collect informa-tion on and understand various threats to corporate networks, and it shortens the reaction time needed to deal with

them, be says. Also important, it enables IT administrators to focus their time and resources on only the problems that need fixing, Milroy says. "It really is the core central instrumentation that enables a security func-

tion to operate within the organiza-tion," says Robert Garigue, chief information security officer at the Bank of Montreal in Toronto.

Radianz has adopted several measures for managing vulnerabilities on its networks and systems. The company doesn't do too many routine vulnerability scans, Hession says. But when it does, it looks for known software holes as well as configuration errors, rogue machines and services that could be

exploited, be says. Radianz has also classified its systems into various groups depending on their importance to the organization. Critical financial and human resources systems and those belonging to senior executives, for instance, set fixed faster than those that aren't as important. Most of the company's desktops have bost firewalls for detecting and

blocking intrusions at the client level This way, even if there are any vulnerabilities on those systems, they are not directly exploitable because of the fact that the personal firewalls

are blocking it." Hession explains.

"It buys you some time to go out and Asset and response prioritization is a key aspect of any vulnerability management strategy, Milroy says,

Categorizing Assets

For the past nine months, CEC has been using an on-demand service from Qualys Inc. to perform asset discovery, asset prioritization, vulnerability assessment and analysis as well as reme-

Like many other companies, CEC has organized its network assets into multiple security categories. It rates those categories from 1 to 5 depending on their importance to enterprise op-

erations. Data center servers and those number crucial databases and revenue-generating applications, for in-You need to have a 7 good quantitative

understanding of what the tools are trying to tell you before you go to the business side and ask them to fix things. BERT BARBOUE, CISO, BANK OF MONTREAL

stance, are considered Category 5,

while some rarely used file servers might be a Category I. Similarly, vulnerabilities are color-

coded depending on their severity with red being the most critical. CEC runs weekly vulnerability scans of its network and prioritizes its responses based on asset importance and vulnerability severity.

A vulnerability in a database server that can be remotely exploited or for which a worm already exists might be assigned a Red 5 rating, which means that it needs to be fixed immediately, Milroy says.

In some cases, a serious vulnerability might exist in a critical system but there may be no immediate threat directed against it, in which case it may be better to do a more planned remediation rather than risk the disruption of an immediate fix, be says.

Realistic Strategies

CEC largely depends on vendor classifications to determine the severity of vulnerabilities, but it also uses its own internal filters and analysis to determine whether an issue is really critical

"I'm trying to keep it realistic. All you really care for are the Category 5 vulnerabilities," Milroy says. "Can you root the machine? Can it get hit by a

worm? Is it remotely exploitable?" Key to a good vulnerability man ment strategy is an understanding of the various interdependencies that exist between systems on your network

says Ed Cooper, vice president of product management at Skybox Security Inc., a Palo Alto, Calif-based wender of risk management software. Sometimes, for instance, fixing the problem on a single upstream server

or router may be all that's needed to mitigate the risk posed by a vulnerability on multiple servers, he says. Knowing precisely which holes to close on which server or workstation

can tremendously reduce response times and help focus effort on the real threats, Cooper says.

Skybox offers a tool that allows a company to build virtual models of its entire network that it can use to simu-

late attacks and understand the potential consequences of vulnerabilities. Often, the risk a vulnerability poses to a system might need to be balanced against the potential business disruption or revenue loss that might result from taking the system down to fix it, says David Giambruno, director of strategic infrastructure and security at Pitney Bowes Inc., a \$5 billion mail and document management firm

based in Stamford, Conn. Software patches and mitigation approaches can sometimes interrupt

needed services or functions on core systems, causing problems that ripple throughout the business. In such cases, it's a good idea to have

an "exceptions management" process under which some sort of compensating controls are put in place. It's also a good idea to make business owners aware of all potential risks and have them sign off on it. Giambrupo says.

The complexity of modern networks makes it vital to have tools for automating the discovery and remediation of assets and vulnerabilities at the network, application and database levels, Giambruno says.

For example, Pitney Bowes is using a service from McAfee Inc.'s Foundstone Inc. business to scan its networks for vulnerabilities once a week

A real-time patch and configuration management tool from BigFix Inc. in Emeryville, Calif., belps Pitney Bowes

quickly test and deploy patches across its global infrastructure in less than an hour if needed.

A database-scanning tool called AppDetective from Application Security Inc. in New York helps Pitney Bowes scan for and discover any vulnerabilties that might exist in the database.

Mandate to Act

Vulnerability management tools and practices can provide a lot of good information about the risks communies face, but they raise their own challenges, users say.

"Vulnerability assessment gives you this view of the entire organization. Then you've got to analyze the results and ask woorself. What have I seen? What does it mean, and who is responsible for fixing it? * says Garigue. "You need to have a good quantitative understanding of what the tools

are trying to tell you before you go to the business side and ask them to fix things," Garigue says. "If not, you are going to end up with a lot of cross talk."

Desktops and other client devices pose bie security risks, but scanning them for vulnerabilities can be challenging because they are so portable, says Amy Hennings, assistant director of information security at George Washington University in Washingto

In the university's case, it made personal firewalls freely available to desktop users as part of a bid to improve security. Ironically, those firewalls are now making it difficult to perform vulnerability scans on the systems,

Hennings says. "The key thing to remember is that IT has limited resources," Radianz's Hession says. "So it's all about priori-

tizing and acknowledging that there'll always be some trade-off issues." At the same time, though, try to keep it simple. "You don't want to make it overly complicated," Hession says.

O 54292

and then it hits vou://

YOU CAN GET 24/7 SUPPORT FOR LINUX NO MATTER WHERE YOU ARE.

Novell:

find out more at novell.com

Do you know where all of your company's business rules are?

Most enterprise users are surprised to discover how many important— and not-o-important— rules, regulations, policies and procedures are seatered all around the organization. For example, last year's marketing manual has gasielines for creating advertising campaignes; equations for calculating, and the season of the season

asked to write them down. In nider, slower eras, this diffusiof policies and rules wasn't such a big problem. But business and IT executives find themselves under greater pressure than ever to adapt to rapid names in the market and in government regulations - as well as to oper ate at maximum efficiency. As a result, they are looking to round up these negade rules and put them someplace they can be easily accessed, updated and applied to business processes. To do that, they're turning to business rules eng es - execution environments and repositories for business rules — and management systems.

CATCHING ERRANT CLAIMS
A case in point: The District of Columbia provides financial assistance to meedy residents, some of whom also qualify for Medicaid or other federal programs. Recently, managers working for the district discovered that the local aid programs was often getting the bill for services that should have been covered by federal programs. If an employee failed to each such errors, the property of the production of the order of the production of

one rune.

To catch more of the bad claims and more quickly process legitimate ones, the district began developing its Automated Claimst Bigibility Determination System. The own system relies on ILOG Inc.'s ILOG Rules beariness rules engine to determine eligibility for D.C. and federal programs. It asks applicants a series of questions — much like a TurboTax surionated tax program does—and then prints out com-

Business rules Business rules management systems help organizations track and enforce the rules that make a business runand keep it on the right side of the law, By sue Hudgerth

for which they are qualified.

The ILOG engine, which is accessible to anyone with a Web browser, has a very high accuracy rating — 99%, according to Donna Ramos-Johnson, ascotate director at Washington's Office of the Chief Technology Officer. That elivers better performance than the legacy system, which is an IBM main-frame running an Adabas. Natural

database that was used internally for claims processing and financial transactions.

Ramos-johnson says more federal programs will be added to the rules repository, which will eventually be used by the legacy system as well—We expect to have the major federal programs online by Spetember; she says,

WHO NEEDS THEM

Rules engines have been around since the early 1990s when companies such as Pegasystems Inc. in Cambridge, Mass., Pair Isaac Corp. in Minneapolis and ILOG in Mountain View, Calif., sold them. They were typically used in rules-heavy industries such as finance

rules-heavy industries such as finance and insurance. Over the past few years, however, many vendors have entered the market, and more companies are looking at rules engines as a way to gain greater flexibility in business operations.

"What's driving new interest in business rules is the need for business agility," says David Kelly, president of Upside Research Inc. in Newton, Mass. "Companies need to be able to create applications and business processes that can adapt rapidly to marketplace

Rules engines provide this kind of flexibility by making it possible to edit the steps, or rules, of a business process. Traditionally, those steps have been coded into the application. But with a rules engine, they can be written in a natural-language authoring language and stored separately in a manused repository. Applications are



then instructed to access the rules engine, and the rules themselves can be updated quickly by semitechnical users rather than programmers.

Also, notes Kelly, business rules systems can help companies prove compliance with government regulations by providing an audit trail of procedures and changes to those procedures.

LIVING WITH LEGACY APPS

Legacy applications are one major reason organizations are turning to rules engines. When companies have many rules embedded in legacy code, moving them to a rules engine enables users to make changes without having to constantly reportic code.

to constantly revite code. Sterling, Va.-based First American Field Services, which provides property inspection and maintenance services to banks, turned to rules management after it reached an impasse with its legacy system.

"It was so spider-webbed, there was custom code for each of our clients.

and then it hits you://

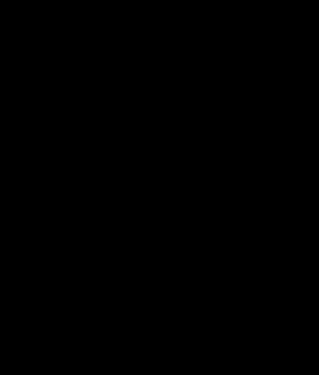
HOW MANY FORMER EMPLOYEES

CAN STILL ACCESS YOUR COMPANY'S

INFORMATION?

Novell.

find out more at novell.com



pleted applications for the programs

for which they are qualified.

The ILIG engine, which is accessible to anyone with a Web browser, has a very high accuracy rating—90 seconding to Donna Ramos-Johnson, associate director at Washington's Cere of the Chief Technology Officer. That delivers better performance than the legacy system, which is an IBM mainframe running an Adabacy-Natural database that was used internally for claims processing and financial

transactions.

Ramos-Johnson says more federal programs will be added to the rules repository, which will eventually be used by the legacy system as well. "We expect to have the major federal programs online by September," she says.

WHO NEEDS THEM

Rules engines have been around since the early 1990s when companies such as Pegasystems Inc. in Cambridge, Mass., Fair Isaac Corp. in Minneapolis and ILOG in Mountain View, Calif., sold them. They were typically used in rules-heavy industries such as finance and insurance. Over the past few years, however, many vendors have entered the market, and more companies are looking at rules engines as a

way to gain greater flexibility in business operations.
"What's driving new interest in business rules is the need for business agility," says David Kelly, president of Upside Research Inc. in Newton, Mass.

agility," says David Kelly, president of Upside Research Inc. in Newton, Mas "Companies need to be able to create applications and business processes that can adapt rapidly to marketplace demands." Rules engines provide this kind of

flexibility by making it possible to edit the steps, or rules, of a business procses. Traditionally, those steps have been coded into the application. But with a rules engine, they can be written in a natural-language authoring language and stored separately in a managed repository. Applications are

GOOD

A members of makes from the unity or good as whet's in it. And the first step of any business rules project should be to disently all of the rules in your organization, according to Ladd Beltsane, serious consultant at Lambort Technic Services LLC in Lambort Technic Services LLC in Lambort Core.

Services LLC in Laborero, Core.

Once you've theritied and entracted your emeting rules, and before you transfer them into a business rules origine, you need to evaluate the quality of the your need to evaluate the quality of the your, need between the quality of the your need to present to make the your need to be edited or presentant to enable to make them seatomatic for the lang term. Accordion to Rules you would need to the present the presen

them sextainable for the long term. According to Bellum, austainable business risks have at least 12 chescrienitics. They should be adaptable, auctidite, easily implemented, estemble, manageable, approplie, resounded, manageable, approplies, resounded, to be a second of the second of the second distribution translate, understandable then instructed to access the rules engine, and the rules themselves can be updated quickly by semitechnical users rather than programmers.

Also, notes Kelly, business rules systems can help companies prove compliance with government regulations by providing an audit trail of procedures and changes to those procedures.

LIVING WITH LEGACY APPS

Legacy applications are one major reason organizations are turning to rules engines. When companies have many rules embedded in legacy code, moving them to a rules engine enables users to make changes without having to constantly rewrite code

to constantly evente code. Sertling, Va-based First American Field Services, which provides property inspection and maintenance services to banks, turned to rules management after it reached an impasse with its legacy system.

"It was so spider-webbed, there was custom code for each of our clients.

and then it hits you://

HOW MANY FORMER EMPLOYEES

CAN STILL ACCESS YOUR COMPANY'S

INFORMATION?

Novell.

find out more at novell.com

and it was just so difficult to change." says Mark Days, development manag-

er for MIS at First American Three years ago, First American be gan developing a property inspection Issue's Blaze Advisor rules entine That application is linked to a DBC database and Visual Basic. Net workflow enemes that consult the rules engine to determine a course of action such as what service to order, Rules are edited via an English-based authoring language and fair Isaac's Visual

Ruleflow Editor, with drag-and-drop

icons for graphically creating business

now," says Days

Brun Stucks, the "enterprise rule sreward" at New York-based Freddie Mac, also credits business rules man atement with simplifying the process of changing rules. Managing policies became much easier after the federalls chartered mortgage lender replaced a

legacy system with an application tied to an ILON: [Rules engine We have a huge number of business rules. Before, to make a change, we'd

have to get a mainframe guy to find the rule, make the change, retest the sastem put it back into service." Stucky says "It was such a lengthy procedure that we often waited until we had several changes to make. Now we can surport rapid change in rules as needed.

Other companies are also using rules engines to improve operating efficien-Cv. AMR Inc., a national medical transportation contears in Greenwood Villace. Colo, uses a rules encine to manage its fleet of vehicles more cost-

effectively *Before, if someone needed transport to get an X-ray, we mucht send out the most expensive rig - an advanced them to the hospital at a buch cost," explains Mark Kalevik a software en gincering manager at AMR. Now the company relies on CleverPath Aion Business Rules Expert from Computer Associates International Inc to deter-

mine which type of vehicle to authorize and how quickly it must respond. DRIVEN BY BPM AND SOA Interest in business process manage-

ment (BPM) is also driving interest in business rules Business rules engines are becoming an integrant VENDORS AND part of other solutions, such as business process management," says Kelly, noting that it's common for BPM

windows to purtner with rules enjone providers. Another complementary trend is the increasing use of With services and service

oriented architectures. When building an SOA framework, organizations are adding a business rules layer to poalong with the business logic, work-

O QuickLink 54510

Chicano-based Promissor Inc. a provider of educational testing and licensing services, is developing just such an SOA. The common criminal a registration system that could be used remotely by on-site registrary with laptops or handheld devices for

This year, easy to make changes

Advise or Control

James Sinur an analyst at Gartner Inc. captains that rules enones are used either to control transactions and processes or to provide advice and

About 50% of business rules en

Should I do this or that? The other 500s are used in hystraess numbers as According to Sinus, there are those

calegories of rules systems

I SIMPLE BULES EXTERNALIZATION This system allows an organization to excress its rules in a standard format. house them in a repository, view them in

decision times or tables, and odd them as needed

2 INFERENCE ENGINE If the mustions you need to put to a rules engine tend to be more sophisticated than simple "yes

or "no" equations. I'hen you may need. an inference engine, which uses probabilities and backward channing through solutions to the same end 3 BEHAVIORAL LEARNING These ad-

variced systems use case based reasoning and are "Itained" to recognize a variety of scenarios

- Sue Hildreth

screening and registering test appliconts. To make the system more were sible by handhelds in remote locations. Promissor built the application using

"We've rearchsteered, with the rules engine as the cornerstone," says Robert Crouch, vice president of IT at Promos sor The company selected Sewickley. Pa-based Haley Systems Inc.'s Haley-Rules engine and Haley Authority rules-authorine tool to create and manage the registration rules. "The Haley engine is light enough to load on

a PDA, so we do not need internet connectivity to operate." Crouch says Promissor preferred Haley's natural-Language interface, which

enabled business users to casily edit rules. It also liked Holes's small footprint, says Crouch

Options for viewme and editing rules can be important. Users may want to work with rules yis a deciwww.comeuterworld.com sion table, a decision tree or some other format that

they're familiar with. Cesar Gomez, manager of system operations and application development at Horizon Casualty Services in Newark, N.L. especially likes the visual features of the RulesPower prodnot from Rules Donor Inc. in Burling.

ton. Mass, which Hurizon installed as part of a new bill-processing program last year "What impressed us was the visual

diagramming of the workflows," Gomez or Sue Hildreth a comeast net.

says. "It's like an interactive Visio screen. It gave the business people the ability to visualize how the business

rules flowed within the program," Horizon's RulesPower-based billprocessing application has enabled the firm to reassign three of its six bill processors to handling exceptions nonstandard claims that require human scrutiny - and to substantially reduce its backley of claims. The use of a rules engine has even cut the cost of processing a claim by 30%, according to Gomez.

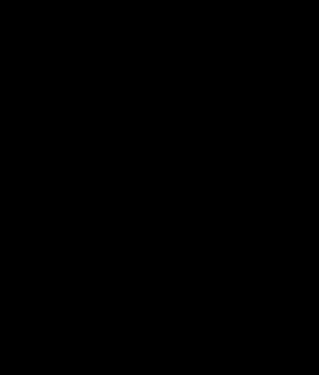
USER-FRIENDLINESS

What matters in a robot management system, says Barnes, isn't the list of featurne it's hote more friendle it is to nontechnical people. Most organizations buying rules engines today want their business managers to be able to create and edit their own rules. "The real differences, and the real areas for improvement, have to do with usability," says Barries. He supposts

that businesses began by evaluating how easy it is for users to formulate business rules with the product The value proposition of a rules eneine is the ability to manage business

rules, and those rules should be defined by business people," Barnes says. "Unfortunately, many products are still too immuture and too technical at this POIDL" O 54280

Hildreth is a freelance writer in Waltham, Mass. She can be reached



and it was just so difficult to change." says Mark Davis, development manager for MIS at First American.

Three years ago, First American began developing a property inspection and maintenance system using Fair Isaac's Blaze Advisor rules engine. That application is linked to a DB2 database and Visual Basic .Net work flow engines that consult the rules ongine to determine a course of action, such as what service to order. Rules are edited via an English-based authoring language and Fair Isaac's Visual w Editor, with drag-and-drog icons for graphically creating business

"It's very easy to make changes

now." says Davis. Brian Stucky, the *enterprise rule steward" at New York-based Freddie Mac, also credits business rules management with simplifying the process of changing rules. Managing policies became much easier after the federally chartered mortgage lender replaced a legacy system with an application tied

to an ILOG JRules engine "We have a huge number of business rules. Before, to make a change, we'd have to get a mainframe may to find the rule, make the change, retest the system, out it back into service." Stucky

says. "It was such a lengthy procedure that we often waited until we had several changes to make. Now we can support rapid change in rules as needed."

Other companies are also using rules engines to improve operating efficiency. AMR Inc., a national medical transertation company in Greenwood Vilge, Colo., uses a rules engine to manage its fleet of vehicles more cost-

*Before, if someone needed transport to get an X-ray, we might send out se most expensive rig - an advanced fe-support system — and transport them to the hospital at a high cost, explains Mark Kalevik, a software en-

neering manager at AMR. Now the moany relies on CleverPath Aion **Business Rules Expert from Computer** Associates International Inc. to determine which type of vehicle to authorize and how quickly it must respond.

DRIVEN BY BPM AND SOA Interest in business process manag

ment (BPM) is also driving interest in business rules.

"Business rules engines are becoming an important part of other solutions, such ment," says Kelly, noting For a list of rules engines and that it's common for BPM vendors to partner with rules engine providers. our Web site.

Another complementary rend is the increasing use of Web services and serviceoriented architectures. When building

an SOA framework, organizations are adding a business rules layer to go along with the business logic, workflow and data layers.

Chicago-based Promissor Inc., a provider of educational testing and censing services, is developing just such an SOA. The company created a registration system that could be used remotely by on-site registrars with laptops or handheld devices for

Advise or Control

James Sinur, an analyst at Gartner Inc., explains that rules engines are used either to control transactions and processes or to provide advice and

"About 509h of husiness rules ennes are used in an advisory role: Should I do this or that?' The other 50% are used in business processes."

According to Sinur, there are three categories of rules systems.

SIMPLE RULES EXTERNALIZATION This system allows an organization to express its rules in a standard format, house them in a repository, view them in

Crouch, vice president of IT at Pron

sor. The company selected Sewickley.

Pa-based Haley Systems Inc.'s Haley-

Rules engine and HaleyAuthority rules-authoring tool to create and

manage the registration rules. "The

a PDA, so we do not need Internet

Web services.

decision trees or tables, and edit them as needed.

2. INFERENCE ENGINE. If the questions you need to out to a rules engine tend to

be more sophisticated than simple "ves or "no" equations, then you may need an inference engine, which uses proba bilities and backward chaining through the rules to discover multiple possible solutions to the same end.

3. BEHAVIORAL LEARNING. These advenced systems use case-based reasoning and are "trained" to recognize a variety of scenarios.

- Sue Hikketh

screening and registering test applisays, "It's like an interactive Visio cants. To make the system more accesscreen. It gave the business people the sible by handhelds in remote locations. ability to visualize how the business rules flowed within the program." Promissor built the application using

Horizon's RulesPower-based bill-"We've rearchitected, with the rules rocessing application has enabled the firm to reassign three of its six bill engine as the cornerstone," says Robert processors to handling exceptions nonstandard claims that require human scrutiny - and to substantially reduce its backlog of claims. The use of a rules engine has even cut the cost of processing a claim by 30%, accord-Haley engine is light enough to load on ing to Gomez.

USER-FRIENDLINESS What matters in a rules ma

system, says Barnes, isn't the list of features; it's how user-friendly it is to nontechnical people. Most organizations buying rules engines today want their business managers to be able to crease and edit their own rules. "The real differences, and the real

areas for improvement, have to do with usability," says Barnes, He suggests that businesses begin by evaluating how easy it is for users to formulate

business rules with the product. "The value proposition of a rules engine is the ability to manage busin rules, and those rules should be de-

fined by business people," Barnes says. *Unfortunately, many products are still too immature and too technical at this point." @ 54280

Hildreth is a freelance writer in Waltham, Mass, She can be reached at Sue.Hildreth@comcast.net.

connectivity to operate," Crouch says.

Promissor preferred Haley's naturallanguage interface, which enabled business users to VENDORS AND easily edit rules. It also liked Haley's small foot-

print, says Crouch. Options for viewing and editing rules can be impor-

tant. Users may want to work with rules via a decision table, a decisioo tree or some other format that

they're familiar with. Cesar Gomez, manager of systems operations and application develop-

ment at Horizon Casualty Services in Newark, N.L. especially likes the visual features of the RulesPower product from RulesPower Inc. in Burli ton, Mass., which Horizon installed as part of a new bill-processing program

"What impressed us was the visual

diagramming of the workflows," Gomez

CIO Discusses IT Methods for Mergers

BY NOBERT L. MITCHELL
Ed Karnins, CiO of Siû billion
computer systems distributor
Avnet Inc. in Phoenix, recently
spoke to Compterworld about
the challenges posed by multiple mergers and massive IT
consolidation projects

You're restructuring your IT infrastructure. Can you give examples of what you're doing? We had nine ERP systems in various places around the world. Today, we are fundamentally down to four and continuing to consolidate. By the first of the fiscal year (in play), we

will be entirely on SAP in Asia.

Why did you have so many ERP systems? When you make 45 acquisitions and you have far-

flung enterprises across the whole, you have brought with those acquisitions some very talented and capable people and the systems they worked on, it's probably not prudent to start by wiping everything out. But over time, there's a relentless pressure [to improve profit margins]. Part of the so-

lution is more and more efficient operations.

What hardware and software defines your IT infrastructure? IBM and HP are the backbone of what we do. On the software side, we had implemented SAP in Europe. We got in very,

very early, so it was a

very steep learning

curve and development process for us. That curve has smoothed itself out quite nicely now so that we're deploying SAP in Asia. We have a homegrown system here in the U.S., and there is nort of Europe

SAP in Asia. We have a homegrown system here in the U.S., and there is part of Europe that has a homegrown system. We use SAP for finance, for example; we use the SAP HR module. We're using their global trading system for ex-

port compliance. Our architecture allows us to bring in the best in a category and marry it up with the rest of the applications.

What major projects have you worked on? We had about 750 servers [when I arrived]. The average

utilization of those was somewhere between 10% and 15%. We did a server consolidation, and today we have about half as many servers that are far more efficiently utilized.

What technologies did you use to do that? It's an evolving process. We had enough servers. The connectivity of those servers is something we tried to be smart about. But there is a whole series of steps going

forward that will get us to a true shared-service kind of environment. I'm very interested in the grid concept. Step 1 was to reduce the number of servers, put more applications on a box. Step 2 is optimizing the boxes to make sure we don't have vulnerability points. Step 3, which is yet to come, is something that will

look like a grid of systems in

which multiple systems could pick up the slack when one system fails or is overloaded.

system fails or is overloaded.

Are there other initiatives besides grid that you're excited about? I think that that which makes it

simpler for the user makes it more productive for every-body. I want an environment where everything that faces the user is Web-like and intuitive. I just got bock from a seminar (that) IBM put on, and I heard a lot about blogs. What I was interested in was the communication methodology using the Internet and how that applies internally in the business. 67 854448

KAMINS CONTINUES
To read more of the interview,
year our Web see.

and then it hits you://

RIGHT NOW YOUR COMPETITORS

ARE DISCOVERING LINUX, TOO.

Novell.

find out more at novell.com

PAY MORE ATTENTION TO SERVERS **BEFORE YOU BUY THEM.** SO YOU CAN PAY LESS ATTENTION

Affordable, reliable, easy to manage. eServer" xSeries" with Intel" Xeon" Processors



xSeries

eServer

BM «Server xSeries 346 Express

Help maximize performance

and improve availability in a

rack dense environment with

Includes features like Calibri

innovation that helps to keep

your system cool and improve

Vectored Cooling, an IBM

nded Design Architecture."



With the power of 3rd genera

a new standard for 4-socket.

64-bit servers. Delivers incre

Up to four 64-bit Intel Xeon

2GB memory expandable

Processors MP 3 66GHz

performance, syste

System features

64GB DDR memory

for 32 and 64-bit agos

Enterprise X-Architecture," it sets

BM (Server xSeries 366 Ex

eServer | ISM eServer BladeCenter HS20 Ex

BladeCen

Designed to support the Intel Xeon Processor and packed with high-evallability features, the eServer BladeCenter HS20 with industry-leading modular design delivers de out sacrificing process

Flexible and easy to use

iom features

Lin to two Intel Year Processors 3 60GHz Un to 14 blades per chassis Supports both 32

and 64-bit applications BM Director Limited warranty; up to 3 years on-site

From \$2,589*

IBM Financing Advantage Only \$71 per month



such as redundant hot-swap power and cooling

Up to two Intel Xeon Processors 3.60GHz Two-way tower with

rack capability Up to 9 hot-swappable SCSI hard disk drives Limited warranty up to 3

vears on-site From \$2,589* iBM Financino Advantage Only \$82 per month:

uptime. System features Lip to two Intel Xeon Processors 3 60GHz Two-way 2U rack server Up to 16GB DDR2 memory using 8 DIMM slots

Calibrated Vectored Cooling IBM Director Limited warranty: up to 3

years on-site" From \$3,999* IBM Financing Advantage Only \$100 per month

to 64GB Six 64-bit Active PCI-X 2.0 IBM Director Calibrated Vectored Cooling Limited warranty: up to 3 years on-site

From \$13,779* IRM Financing Advantage Only \$379 per month

IBM TotalStorage



Simplify storage management to improve productivity

BM TotalStorage DS300 Express Entry-level, cost-effective SCSI storage syste gned to deliver advanced functionality at a lethrough price. Provides an exceptional solution for work group storage applications, such as e-mail, file, print, database and Intel Xeon

System features 3U rack-mount entry level Support for up to 14 Libra320 SCSI diak drives Starts at 584GB / Scales to 4.2TB

From \$5,355°

Smultaneous support of beterogeneous operating system environments for «Series and BladeCenter Limited warranty 1 year on-site"

ISM Financing Advantage Only \$147 per month'

As prices precised and BMV and manufactured medicine prices and AMV a 2005. Prices only only according to confugation. Resident with the comprosition, builded provision by many producing a support of the provision. As when the comprosition is provided as the prices of the provision of the prices of the provision. As when it is required to the provision of the prices of the provision of the prices of the provision of the prices of th



TO THEM AFTER.

With IBM® Express Servers and Storage®

designed for mid-sized businesses, help is here. You've already got a zillion things that require your attention - you shouldn't have to worry about your systems. That's why IBM Express products offer enhanced reliability, which helps them do their job so you can focus on yours.

Take IBM Director, for axample. It proactively notifies you of a potential problem - up to 48 hours in advance. Or our Calibrated Vectorad Cooling feature available on select xSeries systems. It cools your system mora afficiantly. This means more features can be packed into a smaller server. Giving you more functionality and greater flexibility.

It's just an example of our self-managing features that help you take back control of your IT. Which can help lower your maintenance costs, too. Because with IBM Express Servers and Storage, innovation comes standard. It's not optional. Plain and simple, it's built in?

There's also one more great feature - your IBM Business Partner, Which means you can have a one-to-one chat with someone who undarstands your industry and your business - and who's located in your neck of the woods. And for mid-sized businesses, that's really big help in a really big way.

THE WORLD'S HELP DESK

Learn more about our full range of IBM Express products. And find the IBM Business Partner near vou - who is IBM trained to know which systems meet vour specific requirements

ihm com/eserver/helnishere1 1-800-IBM-7777 mention 104CE01A

HELP FOR ANY SIZE PROBLEM

EM TotalStorage DS400 Express

With advanced functionality, the DS400 pr ons. It supports intel Xe ders Fibre Channel de

2GB Fibre Channel storage systems area network (SAN) 3U rack-mount entry level Starts at 584GB / Scales to 5.8TB

From \$8,495*

Simultaneous support of heterogeneous operating system environments for xSeries and BladeCenter Limited warranty: 1 year on-stell

IBM Financing Advantage

Only \$234 per month

earing purces only with may an ideal on options gody and other focus Relating of others are integral to distance an integral of others of other focus relationships and others are integral to distance and other focus and other and other focus and other others are integral to distance of the integral to remain and other others are integral to distance of the integral to remain and integral to relationships and focus and other integral to the in

Protecting Consumer Data on the Cheap

A mandate to protect individuals' personal data in the agency's databases isn't accompanied by any extra funds. By C.J. Kelly

N MY LAST COLUMN [QuickLink 53861], I dis-

cussed how I was called upon to do a fiscal-impact analysis of a privacy bill that was going before our state legislature. The bill is expected to pass soon and become law. And when that hannens, state agencies like the one I work in, as well as private businesses, will be held accountable

for any disclosures of individuals' personal information. Despite my conclu-

uon that complying with this law would require several bundred thousand dollars for just my agency, we and

other state agencies might not receive any additional funds to comply with the mandate. So how do I go about protecting all the personal information that resides in our databases and servers and traverses our

network? No single hardware device or software application will be adequate My best option is to use open-source tools and existing hardware to configure and install an Intrusion-detection system. The IDS will let us monitor network intrusions and attacks and investigate the possibility of data such as Social Security numbers leaving or traversing our network in plain text. At least it's a start

Do-It-Herself

In all my previous, privatesector jobs, I managed the people who configured and ined such systems. Although I have analyzed the data from se systems, correlated the information with output from

to staff and approved plans related to the placement of network taps, network monitor ing appliances, firewalls, VPN concentrators and other secusitu decine I have nove built such a device with my bare hands and put it into production. I am unaware of anyone within the state system who has walked down this path before. But that could be a case

of the right hand oot knowing what the left hand is doing; FF3 state agencies are fairly autonomous. and while efforts are currently under way to improve collabo-

ration and the pooling of talent in the security arena, there doesn't appear to be a strategic plan. So people like me just muddle along, trying to do the right thing. I'm a bit hesitant. Can I do

this? To master the software I have selected - Red Hat Inc.'s Fedora Core 3, Snort, MySQL and BASE, as well as Anache. SSL and PHP - I will have to rely on my little-used *nix (Unix and Linux) skills, as well as white papers and hor to articles written by those much more experienced than me in the nuts and bolts of all

this, I can also consult newseroups and call on many with Fedora purpose scripting langua that's well suited for Wel

such a device with my bare hands and put it into production. friends and colleagues. And I know that help will be readily available from the opensource community, perhaps the most collaborative group of people on the planet.

For those of you unfamilian with these particular pieces of software, bere's a short primer: Fedora Core 3 is Red Hat's free distribution of Linux. Sport can be described as a lightweight network IDS capable of performing real-time traffic analysis and packet logging for IP networks. ("Realtime traffic analysis" is a bit of a misnomer. The type of IDS I intend to build is a passive system: it will watch network traffic and be able to send alerts when rules are violated. but it will depend on a human being to watch for the alerts and react accordingly. In contrast, an intrusion-prevention system sits in-line and either

on a configurable rule set.) Snort can also perform protocol analysis and content searching/matching, and it can be used to detect a variety of attacks and probes, such as buffer overflows, stealth port scans, Common Gateway Interface attacks, Server Message Block probes and operating system fingerprinting attempts. It uses a rules-based language to describe the traf-fic that it should be collecting. and it has a real-time alerting

passes or denies traffic based

MySOL is a multiuser. multithreaded SQL database server that comes bundled PHP a widely used general-

development, and Apache Web server software (utiliz SSI. - Secure Sockets Laver - for security) are available with Fedora Core 3. BASE, for Basic Analysis

and Security Engine, is based on the Analysis Console for Intrusion Databases (ACID) project code and is now recommended as a replacement for ACID. This application provides a Web front end to query and analyze the alerts

coming from the Snort IDS Once I decided on the software, I bad to find hardware capable of running it and performing the network monitoring and analysis. I had to take what I could get, though, I found a Dell deskton that wasn't in use. It had an 80GB hard drive, 256MB of RAM, a Gigabit Ethernet network card and a L6-GHz CPU. From what I have read, this should be adequate, but there's no way of knowing until the system is tested in real time.

I decided to concern myself only with intrusion monitoring for beadquarters and not the branch offices, simplifying the number and placement of sensors. I had already requested that a span (mirrored) port he configured on the primary switch, and I tested it using Ethereal packet analysis soft ware. I know this isn't the perfect scenario, but again, it's a start and better than nothing

Before beginning the soft ware installations, I looked for a how-to suide (instead of my usual approach, which involves installing software, makine mistakes, reinstalling and so forth). The fellow who wrote the guide, Patrick Harper, will surely hear from me. since he states that his document is for the "Linux newbie. as well the Snort newbie." I will let you know how this turns out in a couple of wee and I challenge any interested security managers to do this with me - all by yourselves.

> all the fur. WHAT DO YOU THRUC?



See I De Meft as it happens Seep it in real time. No superpowers required.



identify theft happens from distalance. Traditional security solutions cannot detect it if someone is steeling sensitive date, you won't how until it's fire too late to do anything about it. Toor's activity memorizing solution will behaviour infragraphings' technology detects to their in real time. So you can set it and stop it right away. There's no better way to safequard your critical information and hard-award researching.

To learn more, go to tizor.com/idtheft or call 978-823-5168.





COMING: SENSORS AND PIXELS

EVERYWHERE



BY LINDA ROSENCRANCE

Anatole Gershman

of research

C. MPANY Accenture
Technology Laboratories,
the Chicago-based

development and of Accenture Ltd Gershman spoke recently with Comprinnworld about Accenture's vision for the future of technology, which iscludes inferractive grossey carts and the ability by seur wardnobs to com-

What are the three main trends that will be driving business applications over the next three to five years? If you book, three to five years out, the underlying reshrology trends that will contin

networks 2. The rise of scalable intelligence techniques — all the techniques that can analyze the data that is coming

meetal business insight.

3. The rise of neelinology that enables you to be und act, there from a distance and cope with lost of information, and it will be driven by pixels.

We consider to be not incorporate.

pixels everywhere — we see it in cell phones. Those are technologies that enable us to sense — intelligent sensor net worke to think — technologies that enable our systems to think which is scalable intelligence, and technol ogies that enable us to act on all this intelligence.

What are the business applications of home model? Let vision with the bees the model and the second that the bees the model and the second that the what we will Robine Online. It is considered and and the world than is reflected in our systems, so now to handoug will enable us to commer to a physical reduties, and see them in real time, and for them to be a reflected in our systems in real times we can act on them in real times we can act on them in real resolute times reduties the production.

How will Reality Online do that? Let's take an example of shape one for any

ceries. Supermarkets already collects lot of information about their customers, using log alty cards and chick-out information but they don't do much with that information today. And the customers don't get much beineful.

from this information.

Milliough some supermarkets me directly experience after with smart shopping carts, this ident do much with them except to show customers some advertising and, in some stores, exclusioners can interthose carts exclusioners can use those carts with a little screen attached to it and with a workes connection on so with that cart, the supermarkets can earlially commissions with a customer actually commission with a customer actually commission with a customer actually commission with a customer.

Accenture built a prototype—that creates a model of a particular cus-

tion, is on Mrs builts some can be no are continued but Mrs. Johns with her is said shopping habits while the Mrs. Johns about when did

And that s real mone is the bottom line of a spectranta t and that s come mence for Mrs. Jones: This is what we call experiential to kindodines or experience to third logics—see hindozies of that enable, us to see triplit there where Mrs. Jones needs that action, right there in Ask. 3

Can you take that idea a little further? If we take this a little bu turther into the future, we can imagine that a lot of elothing that we buy is going to have

the future, we can magnine that a let of techning that we buy is going to have RED Legs. Not can cap these tagsom or essence at this, she knot counter, but it voir keep them as to adol, then you can cross some interesting services through what we call an Oblingwork of the counter of the counter of the work of the counter of the counter of work of the counter of the counter of many counter of the counter of the counters of their work of the contents of their work of their factors. numbers do in products of incress and since the windrobe rout the consumers homes, businesses can more creab deliver products and services to where their customers have rather that having to lung their to their stores or Web sites for in lace with

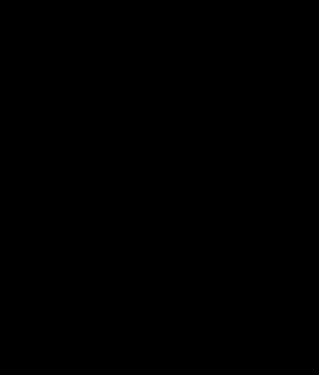
See for example, continue a picket, and you take it from an discourt does trailed the state and knows continuely a men packet and it in singular what cones with it that concould pure has a toward within a force. The Orline Wardrobe better services services to the point of need — you can buy, cluthing thought is continued to continue through a continue of discourt.

How will camera phones enhance the relationship between businesses and

customers? Isodas people use phones to tell samething to businesses, but with the proliferation of comera phones people want to show some thing to businesses. Say I see a chair I like I can take a photo of it and send it to a furniture store and isk it these hore a chair file than

to hunsells, people, our take stupshort tolla, and they can estual supplies token, but it customers supplies token, but it customers to the token to the token to the token token token to the token to the token token token to the token to the will take some time — remember, some token token token token token to the will take some time. — remember, somple electrone vervet to call corner ters: I think it will mose must his level than that, but fithen will take some time because it requires a change on the contraction of the token to continue to the token token to the token to the token token to the token to the token token token to the token to the token token token to the token token to the token token token token token token to the token token token token token token to the token to the token to the token to





COMING: SENSORS AND PIXELS EVERYWHERE

Businesses and customers will share these ears and eves. BY LINDA ROSENCRANCE ______

nable our systems to think, which is scalable intelligence; and technologies that enable us to act on all this intelligence. What are the husiness applications of these trends? Our vision of the business implications of these trends is 0&A customers and enterprises.

nt are the three main transis that will and three to five years? If you look three to five years out, the underlying technology trends that ... will continue to drive innovation are: 1. The rise of intelligent sensor

2. The rise of scalable intelligence techniques - all the techniques that can analyze the data that is coming from all the sensors and could lead to

useful business insight 3. The rise of technology that enables you to be and act "there" from a distance and cope with lots of information, and it will be driven by pixels. We're going to have very inexpensipixels everywhere - we see it in cell

Those are technologies that enable us to sense — intelligent sensor networks: to think — technologies that

what we call Reality Online - a conpection between the physical world

and the world that is reflected in our systems, so now technology will enable us to connect to physical realities and see them in real time, and for them to be reflected in our systems in real time so we can act on them in real time. I think Reality Online is point to revolutionize relationships between

How will Reality Online do that? Let's take an example of shooping for groceries. Supermarkets already collect a lot of information about their cus-

tomers, using loyalty cards and checkout information, but they don't do much with that information today. And the customers don't get much benefit from this information Although some supermarkets are

already experimenting with smart shopping carts, they don't do much with them except to show customers some advertising and, in some stores, customers can use those carts as selfcheckouts. A smart shopping cart is a cart with a little screen attached to it and with a wireless connection so with that cart, the supermarkets can actually communicate with a customer

in real time. Accenture built a prototype . . . that creates a model of a particular customer, say, Mrs. Jones, so we can create an exact model of Mrs. lones with her exact shopping habits -what did Mrs. lones buy, when did

she buy it? We can use this model to predict exactly what Mrs. Jones is likely to need or want, in Aisle 3 of the supermarket on Tuesday afternoon. So with the smart cart, we can actually say something intelligent to Mrs. Jones, like reminding her about what she would buy in ber normal buying cycle in a particular location of the papermarket, because shoppers typically former to buy between 10% and 12% of what they should be buying.

And that's real money to the bottom line of a supermarket, and that's convenience for Mrs. Jones. This is what we call experiential technologies, or experience technologies - technologies that enable us to act right there where Mrs. Jones needs that action, right there in Aisle 3

Can you take that idea a little further? If we take this a little bit further into

the future, we can imagine that a lot of clothing that we buy is going to have RFID tags. You can zap these tags out of existence at [the checkout] counter, but if you keen them activated, then you can access some interesting ser vices through what we call an Online Wardrobe, which uses sensors, tagging and tracking technologies. With the Online Wardrobe, con sumers can selectively reveal the contents of their wardrobe to their favorite merchants. In return, they receive per-

sonalized offerings and timely re-

minders about products of interest. And since the wardrobe is in the consumers' bomes, businesses can more easily deliver products and services to where their customers live, rather than having to lure them to their stores or Wish eiter to make a rale

Say, for example, you buy a iscket and you take it home, and your closet reads the tag and knows you bought a new jacket, and it can suggest what goes with it that you could purchase from an online store. The Online Wardrobe brings services to the point of need - you can buy clothing through a connected closet.

How will camera phones enhance the ----

ws? Today, people use phones to tell something to businesses, but with the proliferation of camera phones, people want to show some thing to businesses. Say I see a chair I like. I can take a photo of it and send it to a furniture store and ask if they have a chair like that.

Technically, people can take snapshots today, and they can e-mail snapshots today, but if customers want to do this, businesses have to create media-enabled call centers with the technology to handle that kind of incoming media in a scalable fashion This will take some time - rem it took many many years to move from simple telephone service to call centers. I think it will move much faster than that, but I think it will take some time because it requires a change in the way businesses think about their customers. O 54120



Yo



Compuware Ships Governance System

Compuware Corp. has begun ing Changegont 10, an integrated IT governance and IT manent system. The software is igned to provide enhanced bility across applications, IT frastructure systems and propect portfolios, according to the Detroit-based company. New functionality includes the ability to identify applications that might be affected by systems being degoed, plus configurable work flow capabilities that enable IT managers to identify a project's status. Prices for the Window based product range from \$400 to \$2,000 per named user

Elemental Upgrades Compliance System

· Elemental Security Inc. or San Mateo, Calif., announced the latest version of its Elemental Compliance System. The new version offers increased platform coverage, including agent support for dows 2000 desktops, Win down 2000 and Windows 2003 servers, and Red Hat Enterprise Linux 3.0. It also has a deeper policy library that includes templates for Sarbanes-Oxley Act Sance and additional Win does applications, the vendor said. New automated remediation of host and application configura tion policies, additional reports and support for Active Directory peration are also inclu Pricing starts at \$100,000.

Oracle, Zend Agree On Integration Link

W Oracle Corn and Zend Tech notogies Inc. in Cupertino, Calif. announced new interretion bereen Oracle's database and Zend's PMP open-source scripti language for developing Web zo ms. The companies plan to liver a tree download in the third quarter called Zord Core for Oracle, which will allow developers to deliver PNP applications that are tightly integrated with Ora-

Know Your Options

▼ECHNOLOGY PRODUCTS are generally implemented either as appliances or as software applications. It's vital for companies to understand the differences in cost, performance, security, installation, maintenance and support for these two different approaches as they make buying decisions.

Suftware vendors typically offer customers only the products they sell. Each product is often just a small piece of the larger puzzle of implementing a complex technology sys tem. The customer is left with the burden of supplyme all of the other components, such as hardware. databases and storage Each of these components can add a significant

amount to the total cost.

In contrast, appliancebased systems usually come as stand-alone, deducated machines that may not require additional hardware and software. They may, however, have specialized ASICs or hardware built in, and they may have higher initial costs. And many cus tomers may not want extra hardware in their data centers, and they may be able to rouse existing servers, databas-

es and storage Appliance-based products are destened for only one standard platform. whereas software-based systems must support hundreds of combinistions of

hardware and software

Appliances can be implemented based on the knowledge of the underlying hardware. This gives the customer tremendous leverage in the performance optimization process. Appli ance vendors typically provide only a few choices of hardware platforms, but if it inves the customer the ability to acquire high-performance hardware. sometimes it is a better way to no. The life expectancy of a default installation of Linux meaning the time it takes for the host to be compromised - is approximately three days. For default installations of Windows operating systems, it's much shorter, usually minutes. For this reason, appliance sendors usually take special precautions to

equip their products with minimum configurations that feature only essential tools and utilities. They may also harden the operating system to allow only

authorized access In contrast, software is generally installed on the customer's own servers. And the burden of securing these servers falls on the customer. Software may be an option for organizations that have standardized security hardening policies and whose employees have security expertise. For other environments, an already hardened ap-

pliance might be the better choice. In a complex technology acquisition, the installation and configuration is often the most time-consuming phase of the project. Appliance-based technologies are designed to spare users the runn of selecting hardware, installing an operating system, keeping patches up to date and handling sener-

al system administration tasks Software products, on the other hand, require a complex installation process that includes these steps: obrain and qualify the server; ensure that the server's operating system is updated to the revision level supported by

the product, update the server with se curity patches; load the software on databases, the Web server and the application server, and configure the applications to work with the database and back-end systems. This can take weeks, if not months, to complete.

However, the road to implementation of an appliance can also be extremely long if the product comes with a nonstandard operating system or software that corporate security

policies do not allow With a minimum operating system installation, appliances are usually not threatened by security vulnerabilities. The appliance vendors also pick up the responsibilities of monitoring and identifying remined natches.

In the case of software purchases, the customers provide the servers and must monitor and identify any patches that may affect their environments. However, many customers are already doing that to support the rest of their IT infrastructures.

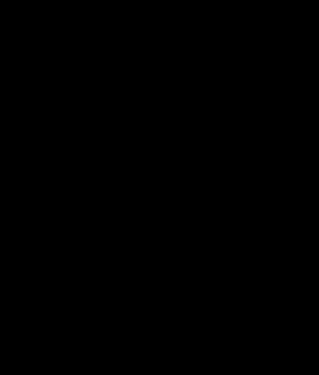
Appliances are integrated hardware and software systems designed to work together. And appliance vendors are responsible for supporting everything, including the hardware, operating system and application, providing a single point of contact when a ques-

tion or problem arises. With software, the customer is left with the burden of determining which hardware component, operating

system or application is at fault when a problem arises. This means the customer, not the vendor, must manage the problem, which may increase the time it takes to repair things. In any product selection process.

you must explore your choices in light of your current resources and your corporate security policy. Those steps will lead to a much more informed and thorough analysis of the real cost of buying a technology product. O 54476

erw.computerworld.com/apinions



BRIEFS

Compuware Shios Governance System Companyors Corp. has become

Elemental Upgrades Compliance System ented Security Inc. in Sec at version of its B

Oracle, Zend Agree On Integration Link

Oracle Corp. and Zond Techdes Inc. in Copertino, Calif. ch will allow do

JIAN ZHEN

Know Your Options

ECHNOLOGY PRODUCTS are generally implemented either as appliances or as software applications. It's vital for companies to understand the differences in cost. performance, security, installation, maintenance and support for these two different approaches as they make buying decisions.

Software vendors typically offer customers only the products they sell. Each product is often just a small piece of the larger puzzle of implementing a complex technology system. The customer is left with the burden of supplying all of the other components, such as hardware, databases and storage. Each of these compone can add a significant amount to the total cost.

In contrast, appliancebased systems usually come as stand-alone dedicated machines that may not require additional bardware and software. They may, however, have specialized ASICs or bardware built in, and they may have higher initial costs. And many customers may not want extra hardware in their data centers, and they may be able to reuse existing servers, databases and storage.

Appliance-based products are designed for only one standard platform. whereas software-based systems must support hundreds of combinations of hardware and software.

Appliances can be impleme based on the knowledge of the underlying hardware. This gives the customer tremendous leverage in the performance optimization process, Appliance vendors typically provide only a few choices of hardware platforms, but if it gives the customer the ability to acquire high-performance hardware. sometimes it is a better way to go. The life expectancy of a default installation of Linux meaning the time it takes for the host to be compromised - is approximately three days. For default installations of Windows operating systems, it's much shorter, usually minutes. For this reason, appliance vendors usually take special precautions to equip their products with minimum configurations that feature only essential

ating system to allow only authorized access. In contrast, software is generally installed on the customer's own servers. And the burden of securing these servers falls on the customer. Software may be an option for organizations that have standardized security hardening policies and whose employees have security expertise. For other environments, an already hardened ap-

tools and utilities. They may also hardeo the oper-

pliance might be the better choice. In a complex technology acquisition, the installation and configuration is often the most time-consuming phase of the project. Appliance-based technologies are designed to spare users the pain of selecting hardware, installing an operating system, keeping patches up to date and handling general system administration tasks

Software products, on the other hand, require a complex installation process that includes these steps; obtain and qualify the server; ensure that the server's operating system is updated to the revision level supported by the product; update the server with security patches: load the software on databases, the Web server and the application server; and configure the applications to work with the database and back-end systems. This can take weeks, if not months, to complete.

However, the road to implementation of an appliance can also be extremely long if the product comes with a nonstandard operating system or software that corporate security

policies do not allow. With a minimum operating system installation, appliances are usually not threatened by security vulnerabilities. The appliance vendors also pick up the responsibilities of monitoring and

identifying required patches. In the case of software purchases the customers provide the servers and must monitor and identify any patches that may affect their environments. However, many customers are already doing that to support the rest of their

IT infrestructures Appliances are integrated hardware and software systems designed to work together. And appliance vendors are responsible for supporting everything, including the hardware, operat-

ing system and application, providing a single point of contact when a question or problem arises. With software, the customer is left with the burden of determining

which hardware component, or system or application is at fault when a problem arises. This means the customer, not the vendor, must manage the problem, which may increase the time it takes to repair things. In any product selection process,

you must explore your choices in light of your current resources and your corporate security policy. Those steps will lead to a much more informed and thorough analysis of the real cost of buying a technology product. O 54476

Are YOU being PAID what you're WORTH?



SALARY SURVEY

INTRODUCING MULTI-MULTI-TASKING-TASKING.



NOW IS THE TIME TO

get the power of dual-core processing from the all-new Dell Precision 380. Workstation featuring the Intel® Pentitum® Processor Extreme Edition. Set the power to multi-thread several tasks at once and GET MORE OUT OF NOW.

THE NEW CELL PRECISION IS WORKETSTRON WIT THE PERFORMANCE AND RELABILITY OF THE RETEL PERTURN' PROCESSOR EXTREME EDITION.



Raise the Bar

Good vendor relationships - and superior service - don't happen by accident. Here's how our Premier 100 leaders get their IT vendors to notch up their performance. Page 42



Sherry Asholm of FedEx wers readers' questions about jobs and careers; and a new book explains how to



It's critical for the CIO to report to the CEO, says former Ace Hardware CIO Paul Ingevaldson. Here are eight reasons why. Page 50

TIL RECENTLY, many CIOs hadn't given much thought to succession planng, thanks largely to a weak economy d low staff turnover "People were balled into a sense of

cency over the last five years, as there hadn't been much job movement," says Bill Homa, CIO at Hannaford Brothers Co., a Scarborough, Maine-based grocer. But that's starting to change. The economy is gain-

ing strength, and turnover is edging up. More important, many CIOs are recognizing that they need to actively develop the next generation of IT managers and technical leaders as thousands of experienced baby boomer IT professionals near retirement age and U.S. colleges and universities churn out fewer computer science graduates.

"Ten years from now, we're going to be facing a big gap" in supply and demand for IT management and technical skills, says Maria Schafer, an analyst at

Senior management at most U.S. companies has done a poor job of succession planning — not only within the IT ranks but throughout most corporate departments such as finance, customer service and human resources, says Schafer. "We just don't think in long-term horizons in the U.S. as they do in Japan and Germany," she adds.

Still, some forward-thinking companies, like General Electric Co., have had succession management programs for years. "We place succession planning as an integral part of our leadership development process," says Chris Perretta, vice president and CIO at GE

Commercial Finance in Stamford, Conn. Under a formal review process that's done for all GE employees each spring, managers conduct an exercise known internally as "Succession C," in which a rigorous, written suc

plan is put together for each worker, says Perretta. GE Commercial Fin each of its 1,200 TT worker



Smart IT leaders take succession planning seriously. By Thomas Hoffman

Don't Miss Your Chance!



Nominate an outstanding IT leader for Computerworld's Premier 100 IT Leaders 2006 Awards program

EACH YEAR, Computerworld editors conduct a nationwide search for IT managers and executives who show technology leadership in their organizations. This prestigious awards program recognizes and honors IT professionals from a wide range of industries, drawing attention to the

tries, drawing attention to t innovative, business-critic work they do.



ELIORALE MOMENCES include CIUs, CTUs, vice presidents, IT directors and managers from user companies, noaprof its, the computer industry and the public sector.

in Compartworld's Dec. 12, 2005, issue and will be our guests at the 7th Annual Premier 100 IT Leaders Conference, March 5-7,



Deadline for Nominations Is May 31

So online to nominate an IT leader at computerworkLcom/p100nominations or © QuickLink a3420.

Questions? Contact us by e-mail at premier 100@computerworkLcom.

Continued from page 39

constantly assessing IT directors and other potential candidates for attributes such as curiosity, business focus and high enemy levels. To help develop its next set of IT and other corporate leaders. GE developed a short-term international notation program more than 10 years ago to move workers among various necorrection control or order to give them "tangible international experience," says Hank Zupnick, CIO at GE Commercial Finance Real Estate, a division of GF

Commercial Finance, also in Stamford.

Detroit-based DTF Energy Co. launched a corporate succession-planning effort three years ago. The program was started following an executive repositioning in the wake of DTE's merger with MCN Eneres. Group Inc. and an early-retirement program that was more popular than expected, says Lynne Ellyn. senior vice president and CIO at the diversified energy company. As part of the effort within DTF Energy's 800-person FT department. Ellyn and other executives regularly review positions that are critical to the ongoing operations of the business, ensuring that

there's a "farm club" of talented IT professionals to

fill critical positions as needed, she says. Ellyn also has "a very detailed succession plan" for her own role. She has identified several IT directors as candidates to replace her - a list that has been reviewed by DTE Energy's executive committee "so

that it's well known," she adds Real-World Testing

Dan Demeter, Korn/Ferry International's CIO tooks for ways to try out his succession scenarios. "When I go on vacation. I put different people in charge," says Demeter who manages a 60-person IT staff at the Los Angeles-based executive placement firm.

At other times. Demeter distributes his responsibilities among various IT directors and grants executive authority to one person. All this helps ensure that his man assement ream will be ready to step in when needed For some IT managers succession management within the IT organization isn't strictly a hierarchical exercise. For instance, when Marriott International Inc considers candidates for an opening within its

1,200-person information resources department, "we look across the organization, not necessarily down and up," says George Hall, senior vice president of human resources for the IT group at the Bethesda. Md. hased hotel operator Bs looking only vertically through the organization for the right person he says.

you may be limiting your resources as to who may be the most effective person to step into that role: Because some technicians want to take on leader ship roles within their domains without having to be come managers. Marriott has put together a leadership track and a rechnology track for its I'l organization. People in the technology track can grow into a

dumber of reductions lead on to the vice president level in terms of compensation, says Hall Like GE. Marrion also offers rotational assignments for IT and business workers alike For example, one of its sensor IT managers recently moved into a corporate HR role while a member of the fi-

nancy department transferred to the IT department to work on financial applications. Hall says In addition to rotating IT and business personnel

Hannaford Brothers. Homa says he likes to place people in roles "outside their comfort zones" to help them grow professionalis

For instance, the person who had been overseeing the grocer's Windows NT operating system group wanted to develop more managerias experience. Se Homa recentis placed him in charge of the company's IT support center, where he'll be managing more personnel and responding "to a for more problems" says Homa.

Truman Medical Centers Inc. recently launched a leadership pipeline program to identify people who are ready to move into roles with greater responsibiltries. In addition to handling they usual work the II people who were selected have each been paired with an executive mentor and have been asked to oversor a strategic project that was hand-picked for them by the company's CEO, says CIO Bill McQuaron

The Kansas City, Mo, based health care provider has also established leadership programs to identify "raw talent" in the organization and to help existing leaders address deficits in skills such as communication or presentation that much keep them from cracking the executive ranks, says McQuaston

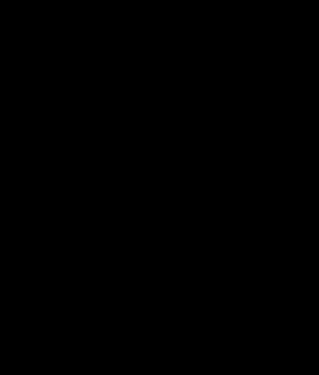
Harder Than It Looks

As essential to 17 succession planning is, it's also fraucht with challenges. The first concerns the demands of technology itself For example, DTF Energy needs IT workers who have a deep understanding of a particular technology, says Ellyn Bui thai focus can leave someone "inadequately equipped to move hori contails or in other areas' where interpersonal business and other soft skills are needed, she says-

Another challenge is retaining people who have hern groomed to move ahead. As companies anvest in training and developing IT workers, they're also making them more marketable. One of the higgest challenges that Marriott faces is low turnover at the senior management level, which can hinder emerging leaders from moving up quickly, says Hall

CIOs also have to guan a better understanding of what makes younger IT workers tick In the past, "when people died off or moved on, you advanced." says McQuiston. Now he says, "people are look for a hetter mad man" for their careers. O 54219

Successful Succession



constantly assessing IT directors and other potential candidates for attributes such as currosity business to cus and high energy nevels. To help develop its neviser of IT and other corporate readers. GL acveloped a short term international rotation research menthou 10 years use to more workers among various as peraphic locations in order to give them "tangeble international experience," says Hank Zopmick, CIC at (a) Commercial Finance Real Estate : decision of GI Commercial Linance also in Stamford

Detroit based DTF Energy Co. (sunched), corporan succession-planning effort three years ago. The constant was started following at executive repositremme in the water of DTE's merger with MCN Free go Group line and an early retirement program that was men, popular than expected says lynns libyr. senior view president and CIC at the diversified energy company As part of the 16 m within DAT time erry 800 person 17 fergument bless me alberter ecutores regularly review positions that are indicate the engoing operations of the business ensuring the --

there's a "tarm club, of talented II professionalism."

fill critical positions as needed, she says become note She has identified severa 11 directors as conditating to replace here in his than has been re-

Real-World Testing

Dar Demeter Kom bern International's C/O coleperson vacation, a put different people in charge, sors Los Angeles-based ever once placement firm

At other times, Demeter distributes his responsibilithe amore various 12 directors and graph a security and thorsty to one person All the helps ensure that he mansumeric cum will be ready a step in wher included For some 12 managers, successed management within the CL organization on samples. But an heat exercise For instance when Marrion International Inc., onsiders, andidates for an opening within its

1200 person internament resources for come to the look across the organization not in cessarite down

Because some rechniques man a rate or reader come managers. Mayoner has a re-excited of carder ship track and exclinitings, nack to the Programs. number of rotes that Yake is not the over prosident

Like GI Marrior ilse office rotationa assign ments for 11 and business weakers alike Toric varie the one of its school II managed to come moved and companies HK to be white manufact of the t name department constitute a the 12 department

e work or financial trade from Half says In addition to not mise. O and business personner Hannahore Broglicts, Homosous by likes to place people it tokes ourside their collider, ones, a help then grow grots socially

for instance the person who may been overseeing the groces. Windows N Logerating system group winted converge more management experience Se Home to community of his at charge of the continues. If surport center where he I be managing more personne. and responding to a formion problems, see Homo

Immur Mode a Louice Increases y combine. endershit e relita program a sacratic coopa who in really in these title news with greater responsibility mes, by andreas or bandling their near work the P people who were solected hose could been pointed with an executive memor and have been taken in oversex. a strategic project that was hand-picked for their by the company s CLO was Cit. Bill McQuision

The Kamer City Mr. Donot beauty care provides has also established leadership programs is identify taw takent" in the organization and is beginning tenters address defauts to skills such as community. money prescription that might keet then from eracking the executive ranks was McQuiston.

Successful Succession

Don't limit your thinking to tormar leadership positions informal leaders, may be critical to your business.

Bon't Irm your analysis to fit the profile of

the person currently haiding the position.

Don't regiect to share the progression paths and let each person in your organization know where he lits into the big picture

hesitate to grow your current leaders to cotmize today's contributions and results

ook a diamond in the rough

miss the conoctunity to find rest-gen leaders within your assessment

keep all of the information in your hear

Don't assume that the unexpected hap only to other people

or heir apparent to those on your team Think nutracte the how think diversity

te the plan as a one-time event and allow it to grow state and ou

Harder Than It Looks

As essentiat as El speciosion elemning is it is also trought with challenges. The first concerns the demands of technology itself for example 1913 Energy needs I'll workers who have a developed estanding of a correctles to breakers was blive But the toute call lease semestic "madequaters equipped to most hore contails or it other areas, when interpersonal business and other soft skills are needed she says Another challengs is retaining people who have peer groomed to move ahead. As companies invest in training and descripting 11 workers that is also making them more marketable. One of the business challenges that Marrion faces is low turnover at the

sense management texel which can hinder emerg mi, leaders from moving no dunckly says Haff CIOs also have to gain a better understanding of what makes counger [7] ecorkers tick. In the past

"when people died off or moved on you advanced." sas McQuiston Now he says, 'people an looking for a better road map' for their careers. O 54219



Ten tips to help you get the best performance from your IT vendors. By Mary Brandel



and firm opinions as to what does and

doesn't work. The change can be seen amon Computerworld's Premier 100 IT Leaders, some of whom agreed to share best practices. Here are their tips on managing your hardware, software and services vendors.

Remove IT from the contract business. "The last thing you want is IT negotiating with vendors," says David Rice, CIO at Siemens Medical Solu-

tions Inc. in Malvern, Pa. "It can get very confusing and make negotiations unwieldy." Take the contract negotiation proc-

ess away from IT and leave it to the experts. The rewards: efficiency, purchasing power and increasingly experienced negotiators

Many companies have established vendor management offices (VMO) to handle vendor relationship management, negotiations and contract cost containment [QuickLink 52017]. When you've got a VMO, IT has to learn to

"When we're working on a deal, we communicate within the organization that only certain people should be discussing it with the wendor," says Rick Omartian, IT chief financial officer at The Guardian Life Insurance Company of America in New York, which has esablished a VMO. E-mail reminders warm IT workers not to talk with any salesperson, lest an innocent remark reveal pricing details on competitive contracts

or internal deadlines and pressures. But not all successful vendor management hannens through a VMO. At Regions Financial Corp. in Birmingham, Ala., each vendor relationship is managed by the IT manager who most of-

ten uses that vendor's products or services. The procurement group heads up negotiations, however, while the legal department handles the contracting process, according to CIO John Dick.

Aggregate urchasing power. entiations can also help aggregate technology purchases and leverage your purchasing power, says Dick. Regions Financial strives to be among its wendors' top 10 custo of sales volume in hones of

BENCHMARKING

maximizing the business relationship and petting deeper discounts, "It's real important to position your purchasing power at the sweet spot of the vendor," Dick says.

Being a key customer has other potential rewards, including reciprocal business, he adds. For example, Regions Financial encourages its top technology providers to purchase its

banking services. Don't get cozy. No matter how strong the relationship is between your company and your vendor, always keep ao eve out for other deals. A case in point: Uotil recently, Guardian was using a single

vices. Then it conducted a full-blown request for proposals and ended up choosing two other vendors that now compete for its business, resulting in a 35% cost reduction. Omartian says. Now, "all vendors have to win our business on every deal," be says.

Guardian ensures that no relationsh gets too cozy. "When we spend a certain mount of money with one particular vendor, we need to substantiate why we went with that one versus another," says Shelley McIntyre, vice president of busi-

ness technology services Finding a better deal doesn't always mean changing vendors. Sometimes it just means lighting a fire under a partner. At MasterCard Inter national Inc., Jim Hull, vice president of engi

neering services. checked out competi

current telecom vendors had overpriced a bid by 100%. "We went back to our partner and said. 'You're in danger of losing this business," he says. And suess what? They matched a competitor's hid

Now MasterCard takes pains to keep everybody bonest. For example, one vendor had previously dominated its storage business, but MasterCard recently added a second vendor to the mix. "Even though you have a great relationship and they have a great prodnet, how do you know you're setting a good deal?" Hull asks.

> Benchmark the industry. Industry benchmarking

is an important tool for setting a fair deal. Contracts should abusys have benchmarking clauses to ensure that the service and pricing you receive stays competitive; this is particularly important in long

term service contracts, says Frank Enfanto, vice president of health care services systems delivery at Blue Cross and Blue Shield of Massachusetts Inc. in Boston. "Ten years ago, things were more costly on a per-unit basis than now," be explains. The benchmarking clause should specify the review process and who needs to be involved.

You can also get pricing trend information from vendors that solicit you for business. "We get an idea of what their pricing is and renegotiate rates [with current suppliers] if we see a downward trend," McIntyre says.

> Don't beat up the vendor on price. There's a caveat to all this talk about price. Sometimes, getting the lowest price is a harbinger of poo quality. Shoot for a mutu-

ally good deal. "This idea that I'm going to squeeze the vendor to get every cent - that's not good business." Rice says. "If it's too sweet a deal on either side, it comes back to bite you later." The relationship can turn adversarial, the supplier may become less responsive to issues you raise, and quality can suffer.

Evaluate, evaluate, ance using standardized procedures on a ly, monthly, semial or annual basis g on the type of relationship

Worst ractices

nging in general, but re-ships with outsourcers re the most challenging of all. According to a white paper

by Technology & Business Inrs, a consulting firm in our N.J. there are some ry wrong things to do when neldering outsourcing IT actions. Here are TBI's out

. Don't rely on a handshake or sore vour due difigence.

. Don't second-quest the de on to outsource. That will un-ermine working relationships.

. Don't rely on a vendor for business advice, strategic ad-vice or thought leadership in

omerging technologies, unless that's specifically the service It is contracted to provi - Don't assume that saving m ey will be the overriding been

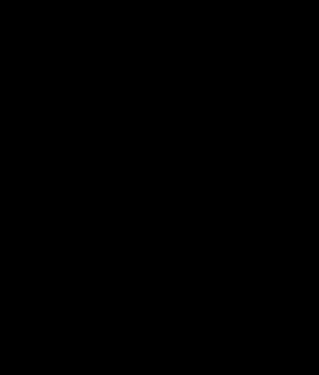
. Don't be complacent if you tice significant perso ange at the vendor.

· Don't outsource a prob That will just make it on or nally sourced crob

pories to rate its hardware and soft ware vendors semiannually, including presales, postsales, cost-effectiveness, technology leadership, financial strength, cost savings and flexibility Siemens meets with outsourcers weekly to review call volumes, mean response time and other metrics. "You

have to hind-dog it." Rice says. Evaluation metrics allow you to catch problems early and be open with the vendor about resolving them. "I've seen people runt and rave about poor service and then not follow through," Dick says. "Vendors need to understand your willingness to escalate to the highest levels in the company and do it rapidly."

Continued on page 45



and firm opinions is to what does and

The change can be seen among Computerworld's Premier 100 11 Leaders, some of whom agreed to share best practices. Here are their tips on managing your hardware, software and

Remove IT from the contract business. The last thing you want a

11 negotiating with year dors," says David Rive C10 at Siemens Medical Solu tions Inc. in Malvern, Pa. 'b can get very configure and make nevetiations unwields."

Take the contract negotiation eyes: ess away from IT and lowe it to the experis The rewards efficiency pur chasing power and men asmely experi-

enced negotiators. Many companies have established vender management offices (VMO) to bundle sendor relationship management, negotiations and contract cost containment [Ouick] ink 520171 When you've got a VMO. IT has to learn to

hutt out "When we're working on a deal, we communicate within the uncanization that only certain people should be discussing it with the yendor" says Rick Omartian, IT chief financial officer at The Guardian Life Insurance Company of America in New York, which has extablished a VMO. F-mail reminders warn IT workers not to talk with any salesperson lest in innovent remark person pricing details on competitive contracts or internal deadlines and ensures.

But not all success ful vendor management happens through a VMO. At Regions Financial Corp. in Birmingham, Ala, each vendor relationship is

managed by the IT manager who most often uses that vendor's products or services. The procurement group heads up negotiations, however, while the leual department handles the contracting process according to CIO John Dick

Aggregate purchasing power. Centralizing cuntract nepotiations can also help nggregate technology purchases and leverage your purchasing power. says Dick. Regions Financial strives to be among its vendors' top 10 customers in terms of sales volume, in hopes of

BENCHMARKING RESOURCES

www.benchmarkportal.com

www.asq.org

and petting deeper discounts. It's real important to position your purchasing power at the sweet spot of the vendor

Being a key customer has other potentral rewards, including recurrical business, he adds for example Regions financial encourages its top technology providers to purchase its

Don't get cozy. relationship is between your company and your vendor, always keep an eve out for other deals recently, Guardian was using a single vendor for its telecommunications ser vices. Then it conducted a full-blown request for proposals and ended up choosing two other vendors that now compete for its business, resulting in a 267- cost reduction Omertian con-

Now, "all condors have to win our business on every deal," he says. Guardian custores that no relationship gets too every. "When we spend a certain amount of money with one particular vendor, we need to substantiate why we went with that one venous another," says Shelles Melntyre, vice president of business technology services.

Finding a better deal doesn't always mean changing vendors, Sometimes it

just means lighting a fire under a partner. At MasterCard Inter national Inc., Jim Hull, vice president of engineering services. checked out competitive offerings and found that one of his

current telecom vendors had over proceed a bad by 1907. "We went back to our parine cand said. You is in dan per of losing this business. Its says And guess what: They matched a

Now Mastert and takes pains to keep exceptedy hourst for example one storage Posiness. For Masterband to cently added a second vestion to the my Tacothoryless has avoid to Intronship and they have a great prod and how or you know you in actions a would deale Hall asks.

Benchmark the industry. ledustry benchmarkon a an important tool for

getting a tim deal it or lans begalingaken. clauses to ensure that the service and pricing you receive stays competitive this is particularly important in long term service contracts, says frank I in funts vice president of health care ser vices systems delivery at Itias Crossand Blue Shield of Massachusetts In-

more costly on a per unit basis rhannow," he explains. The benchmarking clause should specify the review posess and who needs to be involved You can also get pracing trend intor for business. "We get an idea of what their pricing is and renegotiate rates. (with current suppliers) if we see a

downward trend," McIntyre says Don't beat up the vendor on price. There's a caveat to all this talk about price. Sometimes, getting the lowest price is a harbinger of poor nality Shoot for a mutually good deal. "This idea that I'm going to squeeze the vendor to get every cent

- that's not good business." Rice says. If it's too sweet a deal on either side, it comes back to bite you later." The relationship can turn adversarial the sunplier may become less responsive to issues you raise and quality can suffer.

Evaluate, evaluate,

Evaluate vendor perfor mance using standard ized procedures on a weekly monthly semidepending on the type of relationship. Guardian, for instance, uses 12 cate

Worst **Practices**

IT vendor relationships are challenging in general, but reintensions with outsourcers are the most challenging of all.

According to a white paper by Technology & Business Integrators, a consulting firm in Ramsey, N.J., there are some very wrong things to do when considering outsourcing IT functions. Here are TBI's outsourcing no-nos

Don't rely on a handshake or ignore your due diligence.

Don't second-guess the deci-sion to outsource. That will undermine working relationships

Don't rely on a vendor for business advice, strategic advice or thought leadership in emerging technologies, unless

that's specifically the service it is contracted to provide. Don't assume that saving mon

ev will be the overriding benefit. Don't be complement if you notice significant personnel change at the vendor.

Don't outsource a proble That will just make it an externally sourced problem.

gories to rate its hardware and software vendors semannually, including presales, postsales, cost-effectiveness. technology leadership, financial strength, cost savings and flexibility Stemens meets with outsourcers weekly to review call volumes, mean response time and other metrics. "You

have to bird-dog it." Rice says Evaluation metrics allow you to catch problems early and be open with the vendor about resolong them. The seen pounds runt and rave about noor service and then not follow through," Dick says. Vendors need to understand your willingness to escalate to the highest levels in the commany and do it rapidly.

Continued on page 45



Dillard's department stores found a real bargain. Xerox assessed and streamlined their company-wide work processes and printing needs, saving them \$1.6 million. There's a new way to look at it.

XEROX.

Continued from page 43

Apply peer pressure.

Regions Financial sometimes uses peer pressure
to resolve-vurdor service
issues. For example, it had
a problem with its older
achieving only a 99% availability rare
compared with a 99% industry average. The ATM vendor suggested that
Regions purchase all new ATMs — a

achieving only a '9% availability me compared with a '9% industry wervage. The ATM vendor suggested that Regions purches all new ATMs — a materialition-doller inventment. Insected, after awest of exceptionally meetings with all of the ATM service and equipment providers, as well as the internal IT people. Everyone was required to detail problems, resolvetions, costs and sviolance measurer. There were 40 people in the roots, and we used peer presented to make mance? Dick was

The result: "We went from several handred extended outages to less than 15 a month," be says. The company's 1,400 ATMs now have an availability

rate of 98.6%. When MasterCard recently encountered a problem restoring backup data icalled in its hardware, software, activated and storage vendors. It turned out that the tape vendor had mistakene Card. Uttell is proved in could fit the problem, we toold them we wouldn't buy any more work of the problem, we have a support of the problem, we took them we wouldn't buy any more work of the problem, we took them we wouldn't buy any more work of the problem, but today it's much more focused on more time Master-Left's hereds, he says.

Focus on security. When Guardian creat its VMO, it set up standard processes for its tracts, ensuring that terms were consistent across all relationships. When creating the contracts, the com pany decided to also nail down its security requirements. It created stricter intellectual property terms, for example, and required that contractors undergo background checks and that contracting firms carry a certain level rance, "If fraud is committed by one of their employees, we want to know they have insurance to cover that," Omartian explains.

A VENDOR MANAGEMENT PRIMER
To have more about managery erroton, visit one Waltion and read our special report on the topic

Quintal lais 50405

Develop a list of preferred vendors. Regions Financial maintains a strategic vendor management program for the dozen or so of its

most important programmers are suppliers that it deems most important. The criteria for that designation include how much money Regions spends on the vendor's technology, the strategic nature of the products or services, and the common alter of the common alter of the common active of the common strategic nature.

sions, according to Dick. Regions develops special relationships with these vendors and expects higher delivery standards, shared technology investments and reciprocal business.

Remember, not every vendor can be or should be — strategic. You need to differentiate, Enfanto says. "You need to understand what type of relationship you want — strategic or jest techcie." he explains. "In a true partnership, there's a lost of compromise on both sides. You might give up something on price but these get (more in Jervice). In a strategic relationship, he says, the wood or "is really concentrating on you.

Your problems are their problems; your successes are their successes."

Use preterms.
The last place you want to get begged down in wendor management is during contract enterer.

"Once we make the decision to go with a certain vendor, we don't want to find out there's a major (contract) term that they won't agree to," Omarina says. Guardian uses preterm documents, which outline contract term in business lingo rather than in legalese, and gives them to the handful of wendows that

make the final cut during negotiations.
The preterm phase has already proved useful. "There was one time that we'd narrowed it down to three finalists, and we

couldn't get an
agreement from one
on the preterm."

McIntyre says. "so we actually
switched our a vendor." © 54221

Brandel is a contributing writer in Grand Rapids, Mich. You can contact her at mary brandel@comcast.net.



Dillard's department stores hire over 10,000 people a year. Storing and retrieving application, training and benefits packets had become costly. So Dillard's bought into something smart: a Xerox Office Document Assessment (ODA).

Xerox examined their work process across ali 14 Ditiard's business units and recommended key improvements.

First, all analog copiers, stand-alone printers and fax machines were replaced by Xerox DocumentCentre multifunction systems. Then Xerox DocuShare was installed on Dillard's network.

This cross-platform document management system, along with Xerox imaging software, digitized key business processes.

Now, instead of storing and distributing hard copy documents with each new hire, store managers go online for hiring packets and print forms on the spot. No paper inventory. No outdated information. \$1.6 million saved. To see what you can save, call us or visit our website.

xerox.com/learn 1-800-ASK-XEROX ext. LEARN

XEROX.



LOSE THE WIRES. AND, WHILE YOU'RE AT IT, LOSE THE HACKERS.



BEST in REU. These Tribus Driving on obscious have life: Centred follower. Design of output can work writereds with greater frecom And the read with the protection. Because select thin-after creations in the the EQ feature. It is reply of other scorely shares were already select data pretection—a value—accombination of a low for scorely office seccular reports or them. And were the report of the street followers that the second selection is a data control of the score. Second which is the selection of the selection of the second White Lies experience and selection are selection. ThinkPad 851
Embedded Sec. it is Subsystem 2 C (4)
Strong security as a standard formure
SYSTEM PEATURES

Intel Centils, Mobile Retricupintel Rev. V Potrest Sci. 11640 intel Rev. V Potrest Sci. 10640 intel Rev. 1066 intel Log Microsoft Williams. 8P Pichessiona. 14 11/804 TT Ling by ICCA4768. 25648 DEF SCHAM. 3CGB hard Drive.

1049 · :he-t

ThinkPad Carrying Case -Leather Attache \$130 ThinkPad T42 with integrated Fingerprint Reader Embedded Security Subsystem 2 L

Embedded Security Subsystem* 2 L Strong security as a standard feature SYSTEM PEARWAYS I for Century, Michiel Technology, I feet you for Processor 277 L (COMP I feet you for COMPG/1802 Liby

M croselt windows AP Professional 2564/6 DDS SCRAM 4008 hard Drive Cry. Third and 4 file travel weight THINK EXPRESS MODEL

*1479

ThinkPad Wemen's Executive I Leather Total

Contact your authorized reseller.

To find one near you, or to buy direct, go to thinkpad.com/security/m586. Or call 1 866-426-1

ThinkPad is a product of Lecove.



With the Think Express Program. Think Pac indebooks are precent gard with ital business, and your budget in mind

ASK A PREMIER 100 IT LEADER

Premoer 100 fT Leader, an swering questions about landing a job in (T and mak-

ol our Premier 100 IT Lead-

watch for this column each



The second and potentially more advantageous way to approach this is to take your 30 years of expension and outline how you could use it to assist those companies that use offshore partners. One of the challenges companies face when using offshore partners is having solid processes in place to manage the relationship and make it a win for both the company and the partner. So leverage no your 30 years to support this is an avenue

to consider I have 10 years of experience in IT, with a master's degree in computer science, an executive MBA from a top school and certifications such as PMP. CISA and CISM. I am currently working as a

project manager. Can you offer a suggestion regarding a next step in my career where I can leverage all of the above? Focus on how you can amily these skills to business. analysis. Make the link hatween hiss-

how to leverage what you have learned

our and business aren't necessarily common, and they add significant val-Le to a company C 53927

Hanging On to Your Company's 'Deep Smarts'

In their new book, Deep Smarts: How to Cultivate and Transfer Enduring Busi ness Wisdom (Hervard Business School Press, 2005), Dorothy Leonard and Walter Swap argue that the most successivi compretions rety on people who isess a knowledge that is drawn from by beliefs and social forces" based primerity on know how and "know who." As the book's title suggests, the authors main concern is helping organizations find ways to cultivate and transfer deep

smerts so that knowledge can continue to benefit the crossvation after its original nal possessor has moved on.

Leonard and Swap say that deep smarts can be transferred from one management generation to another, but only with a concerted effort. Organizations must select employees with deep smarts and then let them devote a great deal of their time to coaching protects. They use a learning process that the authors call "guided experience," which includes practice, observation, problem solving and experimen

49%

43%

Barriers in the Workforce

In a first-quarter survey of 168 human resource executives and users of "enterprise takent management" systems. Boston-based Aberdeen Broup Inc. identified the following as the top concerns and challenges that companies lace in creating a highperforming workforce

Internal workforce career dev

succession planning and mobility Insufficient talent in market trability to predict or plan future workforce

Inconsistency in hiring practices Inefficiencies in the hiring process inability to compete for top talent -----

Good News. Bad News About CIOs

in a survey of 496 senior executives around the world that

asked which of various emerging" C-level titles this year, CIO came in secand behind theil marketing officer What's most introu ing about this may be the

emerging titles. Maybe

in another 10 years or so

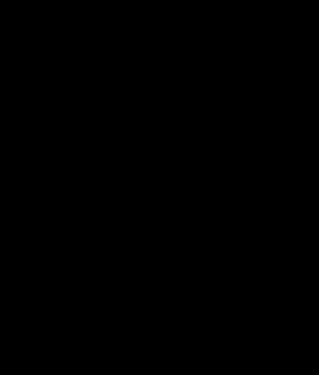
Chief marketing officer Chief information officer Chief technology officer Chief knowledge officer Chief restructuring officer Chief talent officer Chief creative officer

24% 2254 12%



What options does an unemployed mainframe programmer/analyst with 30 years' experience have to regain employment, when outsourcing for mainframe, midrange and client/server is at an all-time high? You have too areas to explore First there are several large compa-

organizations and utilize offshore part ners to bein supplement development. and there are large companies that do all of their development work in-house



Hanging On to Your Company's 'Deep Smarts'

Only in the past few years have com-

paries once again started hining IT re-sources instead of holding head count static, Researching those companies that pursue this strategy might offer mployment options.

The second and potentially more ventageous way to approach this is to take your 30 years of experience and outline how you could use it to assist those companies that use offshore pertners. One of the challenges companies face when using offshore partners is having solid processes in place to manage the relationship and make it a win for both the company and the partner. So leveraging your 30 years to support this is an avenue to consider

I have 10 years of experience in IT, with a master's degree in com er science, an executive MBA om a top school and certifica one such as PMP, CISA and

tiens such as PREP, CISIA and CISIAL I am convently working as a project manager. Can you offer a suggestion reparding a next step in my caree where I can all everage all of the above? Foos on how you can apply these skills to business analysis. Make the link between business and IT, help out technology in layman's terms and define how it can help drive business ocals. Focus on how to leverage what you have learned in the past 10 years and how that apples to the industry you are targeting. Use that to your advantage to create a laser focus on the job you want. People who have the skills to bridge technology and business aren't necessarily

common, and they add storrficant volus to a company. © 53927

regain employment, when out-sourcing for mainframe, midrange and client/server is at an all-time th? You have two areas to explore. First, there are several large companes that do significant amounts of development work within their own IT propagations and utilize offshore part ners to help supplement development, and there are large companies that do all of their development work in-house.

0&A

Barriers in the Workforce

In a first-quarter survey of 168 human resource executives and users of "enternee talent management" systems, Boston-based Aberdeen Group I.c. dentified the following as the top concerns and challenges that companies face in creating a highperforming workforce

Internal workforce career develop succession planning and mobility

= Inefficiencies in the hiring process

- inability to compete for top talent

" Insufficient talent in market " inability to predict or plan future workforce Inconsistency in hiring practices.

Good News, Bad News About ClOs

In a survey of 496 sonier assouthwes around the world the asked which of various 'emerging' C-level tribes will be the most powerful this year, CIO came in sec-ond, behind chief marketing officer. What's most intriguing about this may be the fact that CIO and CTO were included on the list of

emorging Itles. Maybe

in another 10 years or so . . .

SOURCE ASSOCIATION OF EXECUTIVE SEARCH CONDUCTANTS JANUARY PERSONNEY FROM

TAKE PART IN OUR ANNUAL SALARY SURVEY





IANAGEMEN

Looking to better understand enterprise analytics? Apply to attend Computerworld's complimentary" half-day IT Management Summit: Beyond Business Intelligence.

Enterprise analytics enable companies to make timely fact-based decisions using critical information from across the entire organization. By fully leveraging data, technology, skills and processes, successful users of enterprise analytics go beyond simply understanding the past, to predicting outcomes that improve overall corporate performance.

These summits will feature the latest insights of business intelligence industry experts and will give you first-hand information on the innovations and experiences of companies successfully deploying enterprise analytics.

Complementary registration is restricted to qualified IT managers only.

Attend "Beyond **Business Intelligence**"

Using Enterprise Analytics to Drive Fact-Based Decisions

A complimentary* morning-long IT Management Summit in the following cities:

June 21, 2005 · 8:15am to Noon · Dallas, Texas Renaissance Dallas Hotel • 2222 Stemmons Freeway • Dallas TX

June 28, 2005 · 8:15am to Noon · Boston, Massachusetts Boston Marriott Newton • 2345 Commonwealth Avenue • Newton, MA

July 12. 2005 · 8:15am to Noon · Washington, D.C. Bethesda North Marnott Hotel • 5701 Marinelli Road • North Rethesda MD

July 26, 2005 · 8:15am to Noon · Chicago, Illinois The Four Seasons Chicago . 120 East Delaware Street . Chicago, II.

August 9, 2005 · 8:15am to Noon · New York, New York New York Marnott Financial Center • 85 West Street • New York, NY

September 20. 2005 · 8:15am to Noon · San Francisco, California Pan Pacific San Francisco Hotel • 500 Post Street Union Square • San Francisco CA

Agenda Highlights

- · Industry Update from a Senior Computerworld Editor
- · Industry Analyst Perspectives · Customer Case Studies Showcasing Recognized IT Leaders' Experiences
- · Panel Discussion on "Best Practices" and Enterprise Applications · Peer-to-Peer Networking

See the agenda and details for each event, and register online at: www.itmanagementsummit.com Or contact Chris Leger at 888-299-0155

Exclusively sponsored by

Outsourcina How resolved are the letter of

trees and deciding which to fund?



Which statement hest

describes your interest in

Sec 1911 design many after language cross in This was retrigge 60% became showing

The CFO, by definition, is a riskaverse executive whose major respon-

Chain of Command: IT and the CEO

financial well-being of the company. His role is to

question all major expen-

ditures and assure that the

place to maximize returns

particular, the CFO's view-

The CIO must be a risk

taker. Every strategic sys-

tem development project

is risky, since it has never been done

before in the company and will have a

long-term impact. It's extremely diffi-

cult to predict costs and time frames,

especially since the user department probably doesn't fully understand

what it needs. And since most signifi-

cant system developments span multi-

ture-oriented than the CFO. He needs a long-term vision of the future bene-

ple years, the CIO must be more fu-

Under a CFO, IT would operate

more conservatively. Is a conservative

IT department the weapun your com-

pany needs to confront the intense

fits of new development.

on investments. In pub-

ticly held companies in

point is decidedly short

proper controls are in

OR MANY YEARS, IT has been trying to make the case that the CIO should report directly to the CEO. But surveys show that only about 40% of CIOs do so, and the proportion that report to the CFO is on the rise. I contend that this is happening because IT has failed to make the case for the importance of the direct reporting relationship. Here are eight reasons why the CIO should report to the CEO. 1. Today, most companies sibility is to protect the

strategically differentiate themselves from their competitors through the use of IT systems. Since the CEO is the company's chief strategist, he must oversee and direct IT to ensure that it's involved in the most strategic issues un the table. 2. If IT reports to amone

other than the CEO, the technology agenda will be influenced by the objectives of that particular executive. It's imperative that IT develop the most critical business applications, not the

ones favored by one senior executive. 3 Since strategic IT projects can have so much of an impact on the future of the company, it's essential that the CEO develop a working knowledge of the process of project creation. Lack of IT expertise is no excuse to delegate this. The CFO must immerse him-

self in this process to be sure that the company's strategy is being properly addressed. 4. Although the CFO's area of expertise may appear to be the most compatible with technology, I would argue that the CIO and CFO positions are

competitive environment? polar opposites. 5 The costs of IT continue to rise as departments across the company request more from it. Ironically, it's IT

6. If IT is indeed the strategic engine of the business, all parts of the company must be involved in setting its priother C-level executives will under-

orities. If IT reports to the CEO, all the stand that 7. The annual capital expense for IT is often the largest in the company

that must defend its rising budgets. If the CIO doesn't report to the CEO, the

CFO won't understand that the IT budget is an investment in each de-

partment within the company.

It's essential that the CEO understand how this IT capital cumpares to requests from other departments. The CIO needs to be on equal footing with other C-level executives as they present their requirements to the CEO.

8. The IT environment is a minefield of escalating costs, technological setbacks, inflated expectations, shortages of time and resources, and pressure to usin competitive advantage. These difficulties are exacerbated by the limited IT knowledge of must people in the business and the fact that the average CIO tenure is 18 to 36 months, 1f a company wants to maintain some sense of continuity within its IT ranks, it's critical that the CIO be a major "cabinet" member and have the ear of the CEO. Otherwise, the CIO will al-

ways be a convenient scapegoat when times get tough. It's essential that the CIO report to the CEO. One of the most common impediments to this happening, however, is the CIO's inability to speak the language of business. When we become more business-oriented and give up peekspeak, the CEO will find our meetings worthwhile and will antici-

pate rather than dread them. O 54216 For more columns and links to our archives, go to



PAUL M. INGEVALDSON

Chain of Command: IT and the CEO

OR MANY YEARS, IT has been trying to make the case that the CIO should report directly to the CEO. But surveys show that only about 40% of CIOs do so, and the proportion that report to the CFO is on the rise. I contend that this is happening because IT has failed to make the case for the importance of the direct reporting relationship. Here are eight reasons why the CIO should report to the CEO.

1. Today, most companies strategically differentiate themselves from their competitors through the use of IT systems. Since the CEO is the company's chief strategist, he must oversee and direct IT to ensure that it's involved in the most strategic issues on the table. 2. If IT reports to anyone

other than the CEO, the technology agenda will be influenced by the objectives of that particular executive. It's imperative that IT develop the most critical business applications, not the ones favored by one senior executive. 8. Since strategic IT projects can

have so much of an impact on the future of the company, it's essential that the CEO develop a working knowledge of the process of project creation. Lack of IT expertise is no excuse to delegate this. The CEO must immerse himself in this process to be sure that the company's strategy is being properly

4. Although the CFO's area of expertise may appear to be the most compatible with technology, I would argue that the CIO and CFO positions are

The CFO, by definition, is a riskaverse executive whose major responpartment within the company 8. If IT is indeed the strategic engine of the business, all parts of the company must be involved in setting its pri-

orities. If IT reports to the CEO, all the other C-level executives will understand that. 7. The annual capital expense for IT is often the largest in the company

that must defend its rising budgets. If

the CIO doesn't report to the CEO, the

CFO won't understand that the IT budget is an investment in each de-

It's essential that the CEO understand how this IT capital compares to rejuests from other departments. The CIO needs to be on equal footing with other C-level executives as they present their requirements to the CEO.

8 The IT environment is a minefield of escalating costs, technological setbacks, inflated expectations, shortages of time and resources, and pressure to gain competitive advantage. These difficulties are exacerbated by the limited IT knowledge of most people in the business and the fact that the average CIO tenure is 18 to 36 months. If a company wants to maintain some sense of continuity within its IT ranks,

it's critical that the CIO be a major "cabinet" member and have the ear of the CEO. Otherwise, the CIO will always be a convenient scapegoat when times get tough.

It's essential that the CIO report to the CEO. One of the most common impediments to this happening, however is the CIO's inability to speak the language of business. When we become more business-oriented and give up geekspeak, the CEO will find our etings worthwhile and will anticipate rather than dread them. O 54216



cribes your interest in . . . El Infrastructure extreurcing **III** Applications outsourcing

sibility is to protect the financial well-being of the company. His role is to sestion all major expenditures and assure that the proper controls are in place to maximize returns on investments. In publich held companies in particular, the CFO's view point is decidedly short The CIO must be a risk taker. Every strategic system development project

is risky, since it has never been done before in the company and will have a long-term impact. It's extremely difficult to predict costs and time frames, especially since the user department probably doesn't fully understand what it needs. And since most significant system developments span mult ple years, the CIO must be more future-oriented than the CFO. He needs a long-term vision of the future benefits of new developmen

Under a CPO, IT would operate more conservatively. Is a conservative IT department the weapon your company needs to confront the intense competitive environment?

5. The costs of IT continue to rise as departments across the company request more from it. tronically, it's IT

3rd Annual **COMPUTERWORLD**



OFFICIAL BRIEFCASE SPONSOR



Learn Proven, Top-Down Strategies to Achieve **Enterprise Mobile and Wireless Success**

June 13-15, 2005 • The Westin Kierland Resort • Scottsdale, Arizona

ANDRES CARVALLO

HROZ DARUKHANAVALA

ON FLIALKOWSKI







bile & Wireless World 2005 sponsors include:

PLATINUM SPONSORS



PLATINUM PRIVILION

MEDIA SPONSORS



The Leading Conference for:

If Management

fobile-intensive Application Implementers Areless LAN/WI-FI/Network Professionals

Topic Areas Include:

Top-down Planning for Enterpris

building and Defending the Business Case depting Desktop Applications to Handheids

Using Broadband Wireless ISPs

Cellular Mobile Data and Carrier Manage

WLANs and Security

To register or for more information

Expected as of 5/10/00

Simple Semple Semilar Semilar

ing on any treets Af position indiged to sphootise to various effices & client place throughout the US. Qualified applicant the US. Qualified applicant pagend by mad in Salpai Computer Services, US. All Intl-651505, 8600 Leasing Suss 201, Venne, 12, or by email

movad Director. To provide content institution and move content content of the co

d. San Jose, CA 96112 o (408) 382-2261

See Valley, CA seeks & were Engineer The position or Science and brend nice and Technolog igs. Fox returnes in Aritic too. 161 Manager at 805 9-6710 or mail recurren to or Conservation, 8000

Andrew & measure on the composed or three years of the composed or three seeds are good or three years of the composed of the composed of the composed of the composed or three years of the composed of the comp

IT Manager, NY Plan, direct, or coordinate activi-ties in electronic data protiges in electronic data pro-cessing, information sys. systems analysis, and comp programming. De-sign, oversee design de-velopment & testing of business software applicaons. Mast deg wiresp or sch wiftyrs exp in job or I team leader regd Apply

Inc., 350, 5th Avenue, Ne ment position opening at enir Consulting in Houston. TX for the analysis, dign evigon, tasting & marries names of enterprise applicating using JZEE Architecture must have MS/RS in Comp Soi or Engo w/3-5 pm. mp. stati recurre in HP, 830 E. Higgins Rd., Ste # 111 H. Schaumburg, II, 60173, or

Senior SQA Anshrot

To automate Teeting wi SL+WinRunner YC MS+3 or BS + 5 in S or equiv Send CV I

iews IQ LLC at 1180 Sth Ave. 4th FI NY. N 10036 Amr. HR Deot

natice, design, & test

CS, yes exp. Send res to Netson Technologies, Inc. 26 Kennedy Blvd., Suite 300, East Brunseick, NJ 00018 Albr. Mr. Hulterl Yu.

ork systems for indus-

has an opportunity available in the Happenburn, MD area for qualited carefulers Dutes include Design, code, test & deploy software applications, Develop business tvo. Hagerstown, N 1742 Reference \$104.

Informa velopment & testing of business streppications. Maket day wilesp or bach wiflys exp in job or as beam leader rept. Apply INICS, Systec International Inc., 350, 5th Avenue, New York, NY-10116.

Plan, direct, or coord s. avalente arabas, 8

on Land - Conversion -France, CO Millio M to team mercers and and coordinate their support to beam man-your reports and make tons to company man persons. Analyzo rec new ESP op

responsery and Busine Process Model for convert Lagacy Data Write delak close to College and Transfer and Tra Logic Requirements include 2 yrs exp in the job offered finangored by recurse to Michael Service Also Colleges, 2000 5 Colorado Blod. 92-800 Delives CO 80129 Refer to Job # 13A.

Software Engineer for Ratings.

bused developer of software such for the relial socked's pursue four (4) years expen-

OCKLITÉ GYM socks an explo Deletore Analysi in crease & character rulliple deletores & tr days & rise if Reports using Crystal Reports, Crystal Reports Ages Sive, SGS, Savr deletores

e & Deployee set Mili screet phy creater, Deel

phones. Rops. actionaire Wise frackage Studie. 1855 pitches, stimutime NT, 2000 & 27 VB Surger Gheat, SMS. SS creamin * 5 ym may * 8445 & 85CCL. Sand CV to Matt Owners @ Signature Consultania. 125 Tyens S 6850 Callebille. NC 25000; Fast CRASS per 2 25000; Fast CRASS per 2 25000; Fast CRASS per 2

soft tech. by Trust sive Whee

university of an action reporting Property Student Administration and Front Property and

Soft Student Administration CRM and Enterprise Port Prespectat Application Sales Sequences include makes

resided field and 2 yrs mp in PeopleSoft Administration

addonal requestions include orders broadedge of detabase www.application server and also server turning and working southering of establishing and specimenting. Purplishoth Syn-specimenting. Purplishoth Syn-

development of meb-tothe group and press in-character industries including conducting activates require-In country texts.

Interpretabilities also textude texts complex street process, and and another texts.

Interpretabilities also texts to 500 days.

Interpretabilities also texts to 500 days.

Interpretabilities and texts to 500 days.

Inte

ENGINEER

Risch, dsgn, & dlp ome, soft, using VB, ASP, & SQL Regid MS in CS, 3 yrs. exp Resumes: Kaplan, 888 Seventi ue, NY, N 10106 Attn: P. Torres

Computerworld's

Careers Knowledge Center



Get the latest industry news, as well as valuable job- seeking and career enhancement advice.

Read about IT-related issues such as:

- Hiring/recruiting
- Education/training
- Consulting/contracting - Skills

Remember, knowledge is power, and the Careers Knowledge Center is the place to get it!

www.computerworld.com

Computerworld - May 23, 2005

COMPUTERWORLD

HEADQUARTERS One Screen Street, P.O. Box 9171 Framingham, MA CT/OT-9171 Phone (500) 679-6700

Fax. (508) 675-4394 PRESIDENT/CEO Bob Carrigan

/5081820-8100 EXECUTIVE ASSISTANT TO THE CEO (508) 820-8105

VICE PREMIDENTA RAL MAKAGER ONLINE Martha Conners

(508) 620-7700 CUTTIVE VICE PRES STRATEGIC PROOF

Ronald L. Milton (506) 820-6661 EXECUTIVE VICE PRESIDENT/COO

(504) 820-8102

PUBLISHER Matthew J Swee (506) 271-7100

> VICE PREMIDENT/ EDITOR IN CHIEF Don Tennant

(506) 620-7714 VICE PRESIDENT/CIRCULATION Debbie Winders (50to 820-8993

COMPUTERWORLD SALES OFFICES

Matthew J. Sweeney (508) 271-7100 Fax: (508) 270-3882

NORTHWESTERN STATES ACCOUNT DIRECTOR: Jon Barrell (46) 979-3306: ACCOUNT EXECUTIVE: Sara, Jane Roberson Referedo (45) 979-3304, 501 Second Street, Saste IM San Fran-4053, 19200 You Karman Avenue Suite 380, Irvine, CA 12812, Fax. (548) 478-6724 caco, CA \$4107, Fax (415) 543 6010

ACCOUNT DIRECTORS: Jim Barret (45) 978-3308. Sara Cufey (45) 978-3507. ACCOUNT EXECUTIVES: Ensure Hung (45) 978-3308. Sara.lare Robinson-Robot do (45) 978-3304. 501 Second Street, Suite TH, San

ACCOUNT BRECTOR: Six Hands (949) 442-4006.
ACCOUNT EXECUTIVE: John Defendes (949) 442-4006.
4050, 19200 Von Kantan Avenue, Suite 360, Irvine, CA 9200; Fax: (949) 470-6724

FASTERN CENTRAL STATES INDIANA ACCOUNT SIMPETON: Peer Mayer (201) 634-2204. ACCOUNT EXECUTIVE: John Reseman (201) 634-2323, 650 From Read - 2nd Floor, Parames, NJ 67652. Fax. (200) 634-9289

CCOUNT DIRECTOR: Puter Mayor (201) 634-2324 CCOUNT EXECUTIVE: John Radinski (201) 634-

2323, 650 From Road - 2nd Place, Parsonal, NJ 07652, Fav. (201) 634-5263 ACCOUNT DIRECTOR: Law Lade Wales (904) 294-4972 5042 River Park Was Dr. St. Auguston, Ff. 30052, Fox (900) 779-6022 SALES ASSOCIATE: Januar Bloom; (500) 279-710. One Speec Steek Francephan, MA 4002, (500) 989-6700, Fac ADVERTISER'S IMBEX

29-25

23, 25, 27

Have a problem with your Competerworld sobscription?

re missorption label as a valuable marce of elementes for you and us. You can help us by a magazine label here, or copy your rame, address, and coded line as if account on your

22 CHANGES OR OTHER CHANGES 25 charges. We changes, etc. should be a or by a copy of the externation that appear ACCOUNT SHOWS THESE TRAINING

COMPANY

PRINCE.



How to Contact

We invite readers to call or write with their comments and ideas. It is best to submit ideas to one of the department editors and the appropriate beat reporter.

,500,000,0004 ,500,000,000 DXD 39-168 (700:500-5000 . (BIC) 502-7508

.000,600.000 .000,600.000 .000,600.000

a mail needed by bridge or three plants have a large. (200) 859-859

_ COR 800 60%

Continued from page 1 Sears-CSC

CSC argued in its motions filed with the Court of Apneals — from which it unsuccessfully sought an injunction to stop Sears' move to cancel the contract for cause - that Sears terminated the agreement "for convenience due to change of control* as a result of the retailer's merger with Kmart Holding Corp. The merger, which formed a new pareot company called Sears Holdings Corp., was announced in November and completed on March 24. If Sears and Kmart had

March 2, the fee for a convenience termination would have been about \$58 million FI Segundo, Calif-based CSC said. It coted that the fee increased to \$96 million if the terminatioo notice came within 90 days of June 1, the oneyear anniversary of the contract signing date. According to CSC, during a

canceled the contract by

Feb. 18 conference call, Sears' CIO at that time, Gerald Kelly Ir., read from a script, asking CSC to cap the charges at \$58 million for a termination for convenience initiated prior to May 31. "If CSC does not choose this path, we will be forced to consider declaring a material breach under the

agreement," Kelly was quoted as saying. In its motions, CSC said it "refused to submit itself to Sears' extortion tactics."

In documents filed in court by Sears, though, the Hoffman Estates, Ill.-based retailer said it had notified CSC of 65 individual breaches of the agreement since the contract took effect. Sears claimed that CSC's performance was "a dis-

mal failure from the start" and by September had become "so poor that [CSC] was forced to summon a 'red team' from its corporate offices to assess its deficient performance According to Sears, CSC

graded itself as poor in nearly every category of contract performance, including service delivery, project planning and tracking, and team organi-

zation and strength. Sears said it provided CSC with formal written notice on March 18 that the IT services firm had been in material breach of the agreement for several months and that it expected CSC to "cure" the

breaches within 30 days. Requests Denied Meanwhile, CSC claimed that

on the same day, prior to receiving Sears' notice, it filed suit in U.S. District Court in Chicago seeking a temporary restraining order and preliminary injunction to stop Sears from terminating the contract for cause. It also asked the court for a declaratory judg ment that it had not materially

breached the contract. Without ruling on the merits of the case, the district court judge denied CSC's requests. A representative for the district court said last week that the records of the case were not available. However, both Sears and CSC said in their appeals court documents that the judge ordered them to begin arbitration. CSC requested emergency arbitration, but that was also denied, accord-

ing to Sears. Seam and CSC declined to

comment on the court cases and arbitration proceedings last week as did lawyers for both companies. John Thomas, a technology

law partner at Squire, Sanders & Dempsey LLP in Tysons Corner, Va., said he hasn't seen many long-term outsourcing deals become as "publicly messy" as the CSC-Sears one has. But he noted that the fees for terminating contracts for convenience are typically significant so ven-

dors can recoup their heavy upfront expenses. The process of searing up. bringing in people and all the work that goes into the first six to 12 months of an outsourcing relationship is very expensive," Thomas said.

Even so, Akiba Stern, an attorney at Morean Lewis Ac Bockius LLP in New York, said it's likely that CSC and Sears

will settle the case privately, as parties involved in these types of disputes typically do. In its SEC filing, CSC said it also will "vigorously pursue recovery" from Sears for the investments and commitments that the outsourcing vendor made in connectioo with the contract, including its spending on software, property and equipment. Despite their lessal differ-

ences, the two companies contime to work together on IT matters. CSC is obligated to provide IT services to Sears for an unspecified period following the termination, according to the retailer's SEC filing

The contract called for CSC to provide IT infrastructure support services for Sears' desktops, servers, Web site systems, voice and data networks, and decision-support technology, O 54534

completed their merger and

ices alleging that the

wer EDS and Uniteys Corp. for he five-year Medicaid system sect. EDS, which had held the

with and He

EDS Sues State Over Contract EDS spok

nging the awa it could set a prece its processes." he said, adding that EDS has won six of six similar Medicaid contract reis in other states over the

or North Caroline's Office

How to Contact

and ideas It is best to submit ideas to one of the department editors and the appropriate beat reporter

Boo Tennant, editor in chief (508) 620 7714	
Mitch Setts.	
executive editor	
(301) 762 8343	
Julia King,	

(610) 532 7599 SEPARTMENT Grass Statemen, Service 2013 Mile Berlen, postari liveration

Same Service Setator offer 1509-670 1779 009-829 KW REPORTERS Mail Martin, waveley retrievents. 1509 875 8567

Reptor Remotals, busines religions agils der designers Retigness appealer som schaus, redit um 1995 86 196 Daniel Ballione, Il repropriet and eventrant (96) 991 96.0 cine - man lake more retain Local Booton, chape dealer recovers and 000 60 676 Circle Bounceases, provid assyrant

Carol Shee, Annue Line March Surger, SIP work than ON 00K-520 EED Patrick Tribotom, mercey again, the 1507-330 /449 Johanne Warren, court is any factor of the Total & Money, printing approved to a control of the Section of th

OFICIONS Fresh Boost, con con FEATURER Clas Familia, and prochable 108 625 654 1500,500 847

Robert L. Witchel, according

In Lancet, orienprovis with

Shows Markin remove extended

Kee Missis Indoorses office

Mark Rail, editor of large Garr H. Anthon, -alone correspondent John King, rannak servasmont COMPRTESWORLD.COM

STRATES SPEAK FOR

1500 627 897 000100-029 non tro two

100ma/0787 Cord Rand, consumer control step (000,000,000) John R. Briller, considerationale Peter South, Mr. Swinger Propose

Sans Sough, Mark Sovery, And Journal RESTANCE Mari Karle, cour 1 tonope Seeds Wilson, cour 1 tonope

COPY OFEE

Set Seven Austral Dangagette or during 1988 27 605 Mile Parest, Honica Sambelore, ever country Sugara Demaitra, con-etic

REAPHIC DESIGN matter, completes April O'Conner, standard with role John Dates, providentile Sense Catell, protein production

ADMIRISTRATIVE REPPORT Links Genome, of common

CONTRIBUTISS COITOR CORTHIRRIER COLUMNISTS

Michael Cartesbury, Dan Gillmar, Fool Sten. Barbary Compile, Sharvess A. May, David Masshalle, Bart Furtime CONTRIBRTIRS WRITERS Mary Street, Stucy Collett, Steam Street Mary S. Prest, Green State, Stone Wildle

20

14

71.22

20

1 14 36

45.610.16

GENERAL INFORMATION TELEPHONE/FAI

delication and the state of the tex number (500) 870-0031 bear own tip line (500) 820-7716 E-MAIL

Our Web address Sub-senter; a not bloss the low

LETTERS TO THE EDITOR Letters to the editor are vercome and should be sent to letter officerpoter and fallent bullets was arithms and beleficing ma-

MAIL ASSSESS PO Bas 9171, 1 Speen Street SUBSCRIPTIONS/BACK ISSUES

Subscription rates: U.S. 899-99/year Carvolls. ICXLyear Control and South America, SCICClyear of others, \$295/year (996) 884-7327 E-read curbonnia con Back leaves (800) 500-7327

REPRISTR/PESMIST 07(7) 200-1000, est. 172 E-mail _____copristal computer world.com Yest wave reprintinger.com to citize guite.

COMPANIES IN THIS ISSUE

METERSHIPPOP NO SHEAT MONEY OF COME APPLIES COMPUSES

MENCES INC CHILARDICATOR FRANCHO CRICO DISTRING INC ALBERTON UTD ALBERTON UTD CINCO INSTITUTE NO.
COMMERCIA, SINCUPINO.
COMMERCIA, BANCORPINO.
COMMUNICA, ASSOCIATED
ANYTHMENOM, MC.
COMMUNICA, COMP.
COMP.
COMMUNICA, COMP.
COMP.
COMMUNICA, COMP.
COMP. ě AMERICAN POWER MERCAN SOCIETY FOR QUALITY 40 MERC 4 24 MALENDA SECURITY NO MOONTENT NO MEGNICH NC MEGNICHEN OF EXECUTIVE MACTRE MARIE PARCETTO AN CORRESCONTA MONETON ALLWANT DOLLING DO BANK OF MERICA COST BANK OF MERICA COST BEA EVETEMBRIS CHE CHENDY CO BENDMANITOKIN. EAST CONTRAL APILA MILLIAGUNY COUNCY, ELECTRONIC GARA SHISTERMS CORP ELEMENTS, SECURITY INC. BITE CACRO MACAINE JAMES BITE CACRO MACAINE JA

OF MARSHO-ERETTS HC BMC SOFTWARE HIS .

PERSONAL COMMON PERSONAL COMMONS PROFIT MINERICAN PELS PRODUCE MAC PLANSE COMPLYTER SHEETENS COMP PLANSE LITTE **CATTMENC** GETTIME INC. GETTIME INC. GETTIME INC. GETTIME INC. GETTIME INC. REAL COUNTY 6024 10 CONTRACTOR CORP HALFY DISTING NO HAMMATORD BROTHERS CO. 9.20 LOOM MAY COM. EVELHOMOS EASTMENT MO MONEY OR EVELHOW WE . MARCHANISME MARCHA 38

34

ENCOPP DECEMBER MANAGEMENT LERN

namicor ACHIAPEAN HITEMARIONAL HZ CORP 24 LAMBORY FED-MICH. BERNICES LLC LASTMINETE COMPLIC LEADING EDISE FORUM 48 24 21 27 LENGER'S DEPARCE ON LECTTY ALLIANCE LIBERTY MEDICAL SUPTRY ME LONG SOFTWARE GROUP MARROTT WILEMATONAL INC MASTERCARD WITTHATTONAL INC 1975.20 : MCAPEE INC MCONIA COMP MCROSOFT COMP 29 MEANETICA DARK MOREM LEWIS & ROOM STLLP

MATCHIA, METTERY OF STANDARDS AND TECHNOLOGY METCHIA, BLECCING COOPERATIVE ASSOCIATION INC. HEMILETT PRODUME CO. 4 8 6 W ST. HEROPEDISADISFIEMS COMP. 1 14 METROPENSICS INC. HETIPCOMP 146 6 4 27 NETWORK APPLIANCE FIG. NETWORK APPLIANCE FIG. NETWORK SPECUSIONE COMP NEW JEFFECY CREMITMENT OF LABOR * 9 MONEY METADORIS CORP MONEY METADORIS CORP MONEY CANCILINE CEPATRICE! DE HEAL DE MAD HAMME SERVICE! NYTHINA MENTING SERVICE HTERMETONIA NY COLUMN THE SAC CONCLUSIONS CARLLETTE & ACCOUNTES

PACE SOUTHERNOON PROFESSION OF PERSONS INC.
PROFESSION OF STREET INC.
PROFESSION OF STR PETER BONES NO. PLATES PROCESSES NO. PROLESSES PRO

MONETON ME 22 BROWNS ME RECHAPME RECORDS FRANCIAL CORP RECHAPMENTS FAL SAME VIOLENCES CORP SANT LENCES FEALTH STOTEM SAF AND
SAMMOON MERCANT
SAMMAES CALLY GACAF OF
ALLOTORS AND PROFESSIONALS
SEAME-ROLONES CORP
WARE ROTTELON MC CO. . MONEY STATEM MC TEMPO 40

SEMENS MEDICAL SOLUTIONS DC SCHOOL AFLANCE INC SOURCE SECURITY INC 25.72 SQUIFE SANCERS OF

RED-HOLDOY & THE EAST OF TOWN OF MITSURE HEALTON METHORS INC.
THE GUARDING LIFE SHEERINGS
COMPANY OF MINERICA
THOU SOFTMANS TWO SOFTWARE TRANSCOTT BURGHELTS

.

40

*

.

.

TRUMPICAL CENTURE FIG.
TRUMPICAL CENTURE FIG.
TRUMPICAL CONTINUE FIG. US DEPARTMENT OF ACTION 29.0 K2ME 74/64 US SECURITES AND DOWNER COMMERCE WENT STORM TO THE STORM TO THE

WHILE TECHNOLOGY NO HOTE DESIREMENTS

Continued from page I Sears-CSC

CSC a-gued in its motions filed with the Court of Arpeals - from which it unsuc cessfully sought an miunction to stop Sears' move to cancel the contract for cause - that Sears terminated the agreement "for convenience due to change of control" as a result of the retailer's mercer with Kmart Holding Corp. The merger, which formed a new parent company called Sears Holdings Corp., was an nounced in November and completed on March 24.

If Sears and Kmart had completed their merger and canceled the contract by March 2, the fee for a convenience termination would have been about \$58 million. said. It noted that the fee in creased to \$96 million of the termination notice came with in 90 days of June I, the oneyear anniversary of the con-

tract signing date. According to CSC, during a Feb. 18 conference call, Sears' CIO at that time. Gerald Kelly CSC to cap the charges at

Ir., read from a script, asking \$58 million for a termination for convenience initiated prior to May 31 "If CSC does not choose this path, we will be material breach under the

award to Dallas-based ACS

similar Medicaid contract re-

nest 15 months

newels in other states ever the

Danny Lineberry, a spoke

man for North Carolina's Office

of Information Technology Ser-

vices, said Bakoka wouldn't

comment on the matter be-

cause of the pending fitsulion.

A spokeswoman for the De-

partment of Health and Human

Services also declined to com-

ACS spokeswoman Linda

Graham said officials at the EDS

rival are confident that it will pre-

vaid in the legal battle. "It was a

tax procurement, and we have

ment about the lawsuit.

"ugreement," Kelly was quoted is saying. In its motions, CSC

In documents filed in court by Sears, though, the Hoffman Estates III dosed retailer and it had notified CSC of of andividual breaches of the agreement since the contract took

officer Searce claumed that CSC's performance was "a disby September had become "so poor that (CSC) was forced to summon a 'red team' from its comporate offices to assess its

deficient performance." According to Sears, CSC graded itself as poor in nearly evers category of contract performance, including service delivery, project planning

and tracking, and team organi sation and strength Sears said it provided CSC March 18 that the IT services

breach of the agreement for several months and that it expected CSC to "cure" the breaches within 30 days.

Requests Denied Meanwhile CSC claimed that

on the same day, prior to receiving Sears' notice, it filed suit in U.S. District Court in Chicago seeking a temporary restraining order and preliminary injunction to stop Sears from terminating the contract for cause. It also asked the court for a declaratory inde-

ment that it had not materially breached the contract Without ruling on the merits of the case, the district court judge denied CSC's requests. A representative for the district court said last week that the records of the case were: not available. However, both Sears and CSC said in their appeals court documents that the judge ordered them to begin

arbitration. CSC requested emergency arbitration, but ing to Sears. Sears and CSC declined to

on in fees, but not the full \$96 million it owed When CSC refused to can th ices and give up the \$36 million to which it was contractually entitled, Sears crafted

a plan to save itself all fees. - From an emergency matter for

the 7th Cyrout in Olyogen

law partner at Source Sanders

both companies.

comment on the court cases. will settle the case privately, as and arbitration proceedings. last week, as did lawyers for John Thomas, a technology

& Dempsey LLP in Tysons Corner, Va., said he hasn't seen many lung-term outsourcine deals became as "publicly messy" as the CSC-Sears one has But he noted that the fees for terminating contracts for convenience are typically significant so ven-

does can recoup their heaviupfrom expenses. bringing in people and all the work that goes into the first six to 12 months of an out-

sourcing relationship is very expensive," Thomas said. Even so, Akiba Stern, an at torney at Morean, Lewis & Bockius LLP in New York, said

it's likely that CSC and Sears

the adding addg changes in its existing ns in order to cure the s identified by Sear of CSC's reson d of a combi vation of de als, experience, and mounts ts of CSC's respon ties under the agreement.

- From a legal memorphism in

parties involved in these types of disputes typically do. In its SEt. filing, CSC said it also will "vigorously pursue recovery" from Sears for the investments and commitments that the outsourcing vendor made in connection with the contract, including its spending on software, property and component

Despite their legal differences, the two companies comtinue to work together on IT matters. CSC is obligated to provide IT services to Sears for an unspecified period following the termination, according to the retailer's SEC filing

The contract called for CSC to provide IT infrastructure support services for Sears' desktops, servers, Web site systems, voice and data networks, and decision-support rechnology @ 54534

FDS Sues State Over Contract

ELECTRONIC DATA SYSTEMS CORP. last week filed a lawsuit EBS spokesman Travis Ja sowest the North Carolina Decobsen said the company is partment of Health and Human challenging the award because Services alleging that the 4 could set a precedent in deals with other states. The lawsuit agency improperly awarded a \$171 milton IT services contract Tholds the state accountable to to another vendor in April 2004 4s processes," he said, adding that EDS has won six of six

The agency chose Attilated Computer Services Inc. (ACS) over EDS and Upres Corp. for the five-year Medicaid system pact. EDS, which had held the contract for the cast 27 years. filed its lawsuit in North Caroli na Superior Court after losing a string of administrative appeals.

In the lawsuit, EDS alleges that the Health and Human Services Department balant to follow its own procedures for reviewing and awarding the contract. The vendor also clarms that state CIO George Ruisola last month encoperly rejected a summary sudgment

by an administrative law sudo who had need in towns of FDS in the contract dispute. In addition, EDS alleges that the state made procedural errors during the review and appeals processes. It is asking the

ued operation of the North Carolina Medicaid Management Incourt to reverse the contract

been unheld of along," she said. The contract with ACS calls for the replacement and contin - Todd R. Weiss

may on large and at Promoglem Man. and now making office. Proved under Covered Intercompanies and a series of the companies and the

FRANKLY SPEAKING * LEASON HAVES

The Trust Buster

RUST, THAT'S THE POINT of the Sarbanes-Oxley Act: making sure investors can trust our financial statements. Of course, for anyone involved in Sarb-Ox compliance projects, it feels more like trust has been hanged, drawn, quartered, electrocuted, run over by a steamroller, then stood up against a wall and shot, just for good measure. With Sarb-Ox, it seems as if nobody in corporate America will ever be allowed to trust anyone ever again.

So there may not seem to be much comfort in the Sarb-Ox guidelines issued last week by the SEC [QuickLink 54486]. The agency's staff now says we can trust each other - just a little bit.

That means not every single piece of financial data has to be rigorously controlled at every step in its life cycle; corporate manage ment is allowed to use a little discretion. And auditors don't have to be grim, silent inquisitors: they're allowed to tell management what's wrong, explain why it's wrong and even suggest ways of fixing problems.

It's only a little ray of trust in what's become a very dark Sarb-Ox world. But right now, we can use all the hopeful signs we can pet-

If you're not doing Sarb-Ox work, you're probably wondering what the big deal is. Why are ton management and IT staffers all so bitter about it? Sure, it's a huge project - documenting and testing all the controls on financial information and putting controls in place where they're missing. But isn't that really a lot like Y2k was - a huge project that won't add value

ar most businesses but still has to be done? Answer: No. With Y2k, we were saving the world. With Sarb-Ox, we're agents of the inquisition. Y2k was a heroic sprint for an immov able finish line. More than a year into our Sarb-Ox work, it feels like a death march

that will last forever. And for what? Trust, But it seems as if for every drip of trust that investors will gain, we drain away gallons. Users can no longer be trusted. Neither can managers, or even our own IT people. Every access to data has to be lossed, every spreadsheet checked, every number

crunch verified. In an uncomplicated, smoothly professional world, that would be a simple, one-time chore. In the very messy real world of business IT, it's immensely complex and never-ending. And it's overlaid by that "trust no one" ethos. We've always depended on trust to get through crises. meltdowns, glitches and ordinary momentary stupidity. We've trusted one another to reach in

and fix the problems But now that's forbidden. No reaching in. No out-of-process fixes. No trust. The job of Sarb-Ox implementors is to institutionalize paranoia. No wonder they're bitter.

Worst of all, we know it's not our fault. IT faces the lion's share of Sarb-Ox "deficiencies" because we're in charge of the data that will make up those trustworthy financial statements. Our "deficient" systems worked fine for years. Now, because crooked executives at a few companies played fast and loose with their numbers, we're the ones who have to rebuild trust we never deserved to lose.

Thar's why those new SEC guidelines truly are good news. They're the first sign that Sarb-Ox won't be an ever-expanding spiral of paranoia. The focus, the SEC now sensibly says, should be on the greatest risks of financial mis-

statement. It's time to start replacing endless inventories and mindless checklists with informed manarement judgment about where those risks lie

And in IT, we can start to think again about the best ways of protecting business data integrity controls that are effective, not just exhaustive.

And then maybe we'll begin to remember once more that investors want to trust not just the numbers, but also the people behind them. O 54496

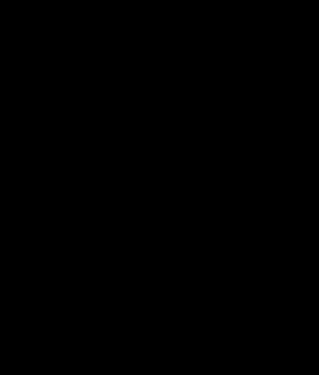
Remember, No Live Demos!

Plint lish's hoss is demonstrating the company's new e-mail client. "He asked one user what was his most important e-mail and then promptly proceeded to risiete it to show how it could be subsoced." fish reports. In the course of restoring it, he inadvertently re riewed shout 300 other deleted messages and, while they were in the process of restoring, tried to delete them again." In the end, they're gone - and so is the important e-mail. User: "So now you're going to show me how to out that e-mail back?"

Inhonted

in script on each des. But w d out in public for





FRANKLY SPEAKING . FRANK HAVES

The Trust Buster

RUST. THAT'S THE POINT of the Sarbanes-Oxley Act:
making sure investors can trust our financial statements. Of course, for anyone involved in Sarb-Ox
compliance projects, it feels more like trust has been
hanged, drawn, quartered, electrocuted, run over by a
steamroller, then stood up against a wall and shot, just for good measure. With Sarb-Ox, it seems as if nobody in corporate America will
ever be allowed to trust anyone ever again.

So there may not seem to be much comfort in the Sarb-Ox guidelines issued last week by the SEC [QuickLink 54486]. The agency's staff now says we can trust each other — just a little bit.

That means not every single piece of financial data has to be rigorously controlled at every step in its fie cycle, corporate management is allowed to use a little discretion. And auditors don't harve to be grin, silent inquisitors; they're allowed to tell management what's wrong, explain why it's wrong and even suggest wars of fixing problems.

It's only a little ray of trust in what's become a very dark Sarb-Ox world. But right now, we can use all the hopeful signs we can get.

If you're not doing Sath-Ox work, you're probably wondering what the big deal is. Myy are top management and IT staffers all so bitter about it? Sure, it's a huge project — documenting and testing all the controls on financial information and putting controls in place where they're missing. But init that really a lot like Yik was —a huge project that won't add value at most businesses but still has to be done?

Answer: No. With YZk, we were saving the world. With Sarb-Ox, we're agents of the inquisition. YZk was a heroic sprint for an immovable finish line. More than a year into our Sarb-Ox work, it feels like a death march that will last forever.

And for what? Trust. But it seems as if for every drip of trust that investors will gain, we drain away galons. Users can no longer be trust-ed. Neither can managers, or even our own IT people. Every access to data has to be logged, every spreadsheet checked, every number

crunch verified.

In an uncomplicated, smoothly professional world, that would be a simple, one-time chore. In the very messy real world of business IT, it's

immensely complex and never-ending. And it's overlaid by that "trust no one" ethos. We've always depended on trust to get through crises, meltdowns, glitches and ordinary momentary stupidity. We've trusted one another to reach in and fix the problems.

But now that's forbidden. No reaching in. No out-of-process fixes. No trust. The job of Sarb-Ox implementors is to institutionalize paranoia. No wooder they're bitter.

Worst of all, we know it's not our fault. IT faces the lion's share of Sav-Do, "dell'clinicies" because we're in charge of the data that will make up those trustworthy financial statements. Our 'deficient' systems worked fine for years. Now, because crooked executives as a few companies played fast and loose with their numbers, we're the ones who have to rebuild trust we perer deserved to look.

That's why those new SEC guidelines truly are good news. They're the first sign that Sarb-Ox won't be an ever-expanding spiral of para-noia. The focus, the SEC now sensibly says, should be on the greatest risks of financial mis-

statement. It's time to start replacing endless inventories and mindless checklists with informed management judgment about where those risks lie.

And in IT, we can start to think again about the best ways of protecting business data integrity controls that are effective, not just exhaustive.

And then maybe we'll begin to remember once more that investors want to trust not just the numbers, but also the people behind them. © 54466



You have to print. Meanwhile, your printer is having a breakdown.

(Isn't it time for a printer you can rely on?)



You can't afford not to buy an HP printer

| Particle 27 G | P





DON'T LET SPYWARE SABOTAGE YOUR ENTERPRISE.

The next threat is no threat with Trend Micro.

Expose and esodicate spyware with Trend Micro's Enterprise-class, multi-level, anti-spyware solutions. They're the only solutions that hlock and clean at the gateway the most effective point of control. Trend Micro. *I global leader at the gateway and industry pioneer. Whether it's a virus, worm, spyware, or spam, we've got you covered

For a FREE evaluation and IDC whitepaper, go to www.trendmicro.com/spyware



